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ART. I.—*Notes on Medical Matters and Medical Men in Paris.*—By DAVID W. YANDELL, M.D., of Louisville, Ky.

Having spent nearly four months in a tour through Europe, in which I have seen the principal cities of the Continent, I find myself at the beginning of the lecture term once more in beautiful Paris. At some future day, when I have more leisure, I may give you some account of the things medical seen on my journey—of the noted medical men of Berlin, Vienna, Venice, Florence, and Rome—and of the medical institutions of Germany and Italy; but at present, amid the pressing calls upon my time made by studies which must not be neglected, I can do nothing more than send you a few of the practical details gathered in my attendance at the hospitals.

Velpeau on Fractures of the Femur.—M. Velpeau, in his last annual summary of the cases that had been treated in his wards during the scholastic year, 1846–'47, among other things, spoke as follows of Fractures of the Femur:

You have had opportunities for observing twelve cases of fracture of the femur, among which were fractures of the body, of the neck, and of the extremity or condyles of this bone. We have had only one example of this latter variety; this was in an exceedingly intractable little boy, who, in a fall had broken the external condyle very obliquely. This single case, however, has sufficed to show you the difficulty of precise diagnosis, as well as of the coaptation of the parts, and how important it is not to confound this variety with fracture of the body, the treatment and prognosis of which are essentially different.

The danger of fractures of the inferior extremity of the femur are of two kinds, and relate—1st, to the possibility of inflammation of the knee; 2d, to the production of a more or less considerable deformity. This last accident may itself be grave in two ways; the joint, deformed either by the fact of the fracture alone, or by the irregularity of the consolidation, will present inequalities that will produce stiffness in the movements, perhaps a demi-anchylosis; or, the extremity of the femur, badly consolidated, as nearly always happens, will offer projections which, pressing on the surrounding tissues, will give rise to a more or less severe and more or less constant pain, and lead to ulceration of the vessels, nerves, skin, etc. As I have hinted, the treatment of fractures of the condyles and of fractures of the body of the femur is entirely different, the former offering difficulties that you do not encounter in the latter case. This is owing to the fact that fractures of the condyles are ordinarily unequal, irregular, angular; and, as in this region the bones are naturally irregular, covered with projections or points, it is very difficult to distinguish, in the midst of the tumefaction of the soft parts, what are the connections, extent, and form of the fragments. These difficulties which you experience in establishing a pre-

cise diagnosis imply that there are no fixed rules of treatment; for how can you deal with fragments of which you know neither the form nor direction? How effect an exact coaptation? Especially, how can you maintain these fragments on which you have no hold? Thus it is we are obliged to grope our way; here you have the reasons which induce us to place by turns the leg in the various degrees of flexion, extension, and rotation, until we succeed in bringing the fragments in a favorable position. But even here, the muscular force acts against the efforts of the surgeon; the muscles in drawing upon the leg tend to elevate the tibia, and place it upon the fragments, which it slips between, separates, and produces a transverse displacement of greater or less extent.

You were able to observe all these accidents in the case of our little patient whose indocility added to and increased the difficulties just enumerated. You saw the irritation caused by the irregularity of the fragments produce an abscess, which gave me for an instant much uneasiness for the joint; though this abscess, once opened, improved very rapidly and the patient left the hospital cured. You have had an opportunity of seeing him since, as he returned and passed some days in our ward for a light contusion situated on the right leg.

It has been your good fortune to have had opportunities in the course of this year for observing the three varieties of fracture of the neck of the femur. We have had, you will remember, patients in whom the fracture was seated within the articular capsule, (*intra capsular fracture*); in others the solution of continuity was external to the capsule, (*extra-capsular fracture*); finally, some have offered the modification called *fracture by penetration*, in which the neck of the femur was *buried* in the head of the bone. Two patients have presented us the characters of this last species of fracture; that is, with them, there was notable shortening of the limb, rotation of the foot outwards, absence of crepitation, and the leg could be lifted up. If the member did not lose its functions, if there was not immobility, it was owing to the fact that the

neck having entered the head of the femur, the penetrated fragment maintained the fragment penetrating it.

In the extra-capsular fractures, there is projection at the hip; the pain is seated beneath the articulation; there is shortening, mobility; possibility of giving to the member its length; the leg cannot be raised; the point of the foot is turned outwards.

In intra-capsular fracture, the fold of the groin is effaced; the pain exists on a level with the articulation; the rotation outwards is more marked than in the former case; shortening; loss of functions of the member.

You have been able to see that if these fractures have a certain gravity, it is much more by reason of the advanced age of the patients, of the necessity of confining them to bed, than to the solution of continuity itself. There are no important organs or viscera in this neighborhood to be wounded. This class of fractures occurs mostly in old people, and one is hardly at a loss to comprehend that a casualty which requires two or three months of confinement, is serious. Nevertheless, it should be remarked that certain old persons support the immobility without any great inconvenience.

You may remember the woman, 83 years old, who kept her bed for more than two months without accident, without her health appearing affected. But I must insist that the contrary is most often the case, and one can easily conceive that there are very few healthy persons who after keeping their beds for a certain length of time, would fail to become diseased, for exercise and motion are necessary to the integrity of the functions; the circulation languishes, the digestive organs grow sluggish, no longer act with their accustomed energy, and finally become covered with a muddy coat, which alters the mucous membrane. Nothing is more certain than that if you place an old person in these conditions he runs the greatest risk; he loses his appetite, then comes diarrhea, marasmus, and often death. I hope you will remember this; many old persons who are treated for fracture of the neck of the femur die in this way.

Another danger attendant upon fracture of the neck is owing to the prolonged compression experienced by certain projecting regions; such as the eschars of the sacrum, grand trochanter, etc.; eschars which may penetrate to the bones and change them; which produce an abundant suppuration, and react upon the whole economy in an unpleasant manner. It is in virtue of these various circumstances that the fractures of the neck of the femur possess gravity.

The question of the consolidation of intra-capsular fractures has been differently resolved. Sir Astley Cooper rejected the possibility of consolidation, because the head of the bone, receiving fewer vessels, no longer preserved the same vital energy, and could not furnish the elements of the reparatory work. This opinion, however strange it may appear at first glance, found numerous partisans, among whom was a celebrated surgeon of Montpellier, Delpech, who went so far as to offer a prize of two thousand francs to the person who would show him a consolidated fracture of the neck of the femur. It is also true that he afterwards awarded the prize to himself.

One of the first who examined the other side of the question was Smith, who published a memoir accompanied by plates, and endeavored to prove that these fractures could be consolidated. But it is apparent from the difficulty which he had in collecting examples that this consolidation, if it is possible, is also extremely rare. It is clear, that in the observations he cites, the consolidation is real; but these facts appear to belong to the category of fractures by penetration. Now, for my own part, I no longer consider the consolidation of fractures of this kind to be an open question. It was not of those that Sir Astley Cooper meant to speak, because they had attracted very little attention up to that time. The memoir of Smith, then, does not demonstrate the possibility of the consolidation of intra-capsular fractures, without penetration of the fragments.

Even in the mass of facts collected by M. Chassaignac,

and borrowed especially from Amesbury, Stanley, Vanhonte, Brulatour, etc., one sees that if these fractures do consolidate, such instances must be rare; and that in no case is the consolidation ever complete as in the body of the bone.

How can we comprehend, in fact, that intra-capsular fracture can be completely consolidated, when we remember that the head is no longer held by any thing but the round ligament, which contains only a few capillary vessels? How hope, under such circumstances, that a complete callus will be developed, especially when it is impossible to maintain the two fragments in perfect coaptation? A priori, then, the consolidation appears difficult; and since the facts collected and the observations published, are not of a nature to remove all doubt, one is right in still doubting.

Here, now, is probably what passes: there is not a complete callus, but a considerable work is established, which leads to the formation, within the capsule, of osseous plates—of stalactites. These osseous plates, at first small, gradually extend, join to one another, and form an imperfect mass which encases the neck of the bone, re-establishes its solidity, and thus causes the thigh to recover its movements. But in certain cases, the capsule becomes itself encrusted with calcareous matter, the movements remain, embarrassed, difficult, and the lameness persists.

From all this, one may deduce a therapeutic consequence. Why treat these fractures, since, as I have shown you, the treatment may be attended with serious inconveniences and the consolidation would be irregular?

This is the starting point of the doctrine of Cooper.

I will not speak of the various bandages invented for the treatment of fractures of the neck of the femur. For twenty years I have in some degree left the patients to themselves. If the fracture is extra-capsular, mobile, in an old person, I place the member in demi-flexion, put a cushion under the popliteal region; then at the end of fifteen or twenty days, I make the patient get up and walk with crutches. The weight of the member makes extension in the

walk; the movements do not hinder the formation of stalactites, of the osseous vegetations which establish the consolidation. From this mode of treatment it results that the patients are able to walk about at the end of the third week, first with crutches, then with a cane; whereby, consequently, they do not incur all the dangers attached to a long confinement in bed; the movements of the limb are established in part, and sometimes the lameness at length disappears. At the end of six weeks upon this plan the patients are at the same point as after three, four, and five months of treatment by immobility, and they have not been exposed to the same dangers. Further, they have not had to support the pains caused by a bandage keeping up continued extension, nor all the accidents that it induces, eschars, œdema, etc. Certain surgeons reject this treatment from fear of shortening; but this is entirely chimerical; for the patient does not rest upon the weak member, he walks upon the other foot, and, as I have just now told you, the weight of the member exercises a continued extension which one must court. The fragments are not agitated by the movements, for these do not go on at the articulation of the hip where they would produce a lively pain. Of the twelve patients whom we have treated this year, one alone has died, and that occurred because we were not able make him get up.

Cyst of the Liver.—Repeated punctures.—Consecutive Inflammation.—Influence of the air in accidental cavities.—I propose calling your attention this morning, said M. Velpeau, to the patient, the history of whose disease since his entry into the hospital, which was many months ago, until this moment, when I intend performing a sort of operation upon him, offers us useful instruction in a practical point of view.

This man has in the right hypochondriac region a tumor belonging to the liver; I believe that this tumor was primarily hydatic, though I could in no wise detect that particular *frémissement* which has been called *bruit hydatique*.

The first time that I punctured it a transparent, citrine, limpid liquid came away; the patient was relieved, and it was sometime before the tumor filled anew. I then practiced puncture for the second time, when the liquid had another aspect; it was reddish; the tumor now refilled itself with greater promptitude. A third puncture was made which gave issue to a liquid again modified in its aspect; it was redder and thicker. A fourth puncture became necessary. It is now some weeks that well characterized pus has come away from the tumor. You see this was a cyst, at first almost inert; in consequence of the first puncture there was an irritation established which was not very intense; after the second it was more marked, and after the third, the irritation was sufficient to determine locally a very violent pain, and an inflammatory action which gave rise to a general febrile reaction to such a point, that pus was formed in the tumor and the fourth puncture gave issue to it.

Thus, this cyst, at first perfectly inactive, gradually became irritated and inflamed, and has become something more serious than it was previously. What is the cause of this change? It is most certainly not the introduction of air that we can accuse; the canula was extremely small, and all necessary precautions were taken in introducing it to prevent the introduction of air into the cavity. I repeat, that puncture practiced in the deep-seated tissues may often give rise to inflammation without the air having penetrated, without the air having any hand in it.

There are persons who think that subcutaneous punctures cannot produce inflammation; this is an error. These punc tures are not always unattended by danger; they are not as innocent as they are represented to be.

Our patient had a cyst for many years; it gave him almost no trouble; all the functions of his system were well executed; he was in almost perfect health, and now behold him in an entirely different state. Before, it was possible to leave him in the state in which we found him; now, it is impossible to leave him without treatment.

For a long time I have hesitated about treating him; for the means which we possess against his disease are not to be depended on, and may even be of dangerous tendency.

In surgery, we often have cases comparable to this, as, for example, tumors of the ovaries, fibrous bodies, which are, in a great number of circumstances, compatible with long life. For these tumors, persons have dared to open the abdomen and thus extirpate them; and it is especially in England and America, that these rash endeavors have been made. As for me, I blame them very severely; these are unreasonable attempts which are unworthy of surgery. In the beginning, I recoiled before an operation, and I had engaged our patient to quit the hospital, but he afterwards refused; he wished that I should cure him. I decided with pain to make a second puncture, and this little operation has determined an inflammation which may result fatally if I leave the patient without treatment. For thirty years his affection has been beyond the resources of art; to-day it may be combatted. A first procedure consists in incising the walls of the abdomen upon the tumor, to lay it open to its bottom and put in a pledget of lint. This is the most prompt, but also the most dangerous procedure, for the peritoneum is opened, and the matter may escape into its cavity; a double chance of peritonitis. Unless one be assured that the peritoneum is adherent, he must reject this operation. Dr. Graves, of Dublin, acts in another way. He incises the abdominal walls layer by layer; then, arrived at a few lines distance from the peritoneum, if there be adhesion, he punctures on the spot, if not, he stops and waits, hoping that a local inflammation will cause the peritoneum to adhere to the tumor and the walls of the abdomen.

This procedure is not sure; first, because it is impossible to go with certainty just to the peritoneum, without wounding or opening it, and afterwards because the inflammation, instead of being adhesive, may be purulent, and the pus, if it escapes into the abdominal cavity, will produce a peritonitis.

Further, the tissues in cicatrizing, thickening, may prevent the tumor from opening externally.

M. Begin does better. He incises in the same way to the peritoneum; then he incises the peritoneum as respects the tumor. This last naturally becoming engaged in this species of button-hole, contracts adhesions upon its sides; later, the tumor is punctured. This procedure has, to my knowledge, been employed two or three times by M. Begin; I have myself used it twice with success; but it is only applicable when the tumor is globular; if it be flat as this is, it does not engage itself in the button-hole, and its gliding upon the borders of the wound may produce an inflammatory irritation.

A fourth procedure is that of M. Récamier, and it is this that I am going to adopt in the case of our patient, because it is the best. It consists in the application of caustics to that portion of the abdomen corresponding to the tumor. It is necessary to have a deep eschar and as large as a five franc piece. Three or four grains of caustic must be applied. Then wait for or endeavor to hasten the fall of the eschar. Apply the caustic four or five times, until you have destroyed the entire thickness of the abdominal wall. You thus forcibly produce an eliminatory inflammation without, and an adhesive one within. When you arrive at the cyst, introduce the instrument. These means are then, so to speak, but preparatory. They have for their end to bring the tumor to the exterior. This obtained, you act upon this tumor as you would act upon an external one. As far as the operation goes nothing is more simple; but is this all? We have here parietes of a thickness more or less great, but slightly retractile; the tumor may always remain open, as nothing tends to obstruct the cavity.

There remains a large cavern which may secrete a pathological liquid; and as it is almost impossible to make the opening in the most depending portion, the liquid stagnates and is decomposed by the air; this air is not at all an excitant, as has been said, but merely a chemical menstruum necessary

by virtue of its oxygen to all fermentation—to all decomposition.

Do you believe that the tissues will remain indifferent to the presence of these putrid products? No. The dead nature in chemical reaction will be at war with the living tissues. It has been counselled, the tumor being open, to exercise no pressure upon it, to leave it to empty itself by the organic retraction of the tissues.

It is an error to believe as many do, that the air may enter every open cavity. The air by no means enters with facility the cavities whose walls are soft; the atmospheric column may often approach and apply these walls one against the other, instead of being introduced between them. But if the walls are inextensible, the atmosphere is incapable, by its weight, of effecting the occlusion of the cavity by the mechanism that I have just mentioned.

In our patient, the fear of the introduction of the air into the cavity is well founded; the central parietes as well as the parietes of the liver are but slightly flexible; this inevitable introduction will not, however, produce a direct excitation of the tissues, but will simply afford a chemical menstruum to the morbid liquids which they will secrete. In what manner shall we oppose the decomposition? In these cavities, it is the practice to make detergent antiseptic injections, that are made to lodge there for a certain length of time by closing the opening, which may be done by various means.

Some days after, the inflammation assumed a bad character, pus was effused, and, escaping into the abdomen, a peritonitis was developed, from the effects of which the patient died.

Continuation and conclusion of M. Hugier's lectures on Catarrh of the Uterus. Diagnosis.—We have already seen what are the characters proper to the discharges in catarrh of the uterus, but we should not, although these afford the principal and essential elements of the diagnosis, omit to inquire

whether the disease be simple; whether due to a local or general cause; whether dependent or not on an affection of the tunic, of the neck, or of the body of the uterus; whether it is the consequence either of a lymphatic temperament, an anemic, or a scrofulous taint. These, you will at once perceive, are all very useful in furnishing the essential therapeutic indications, which we now proceed to speak of.

Treatment.—Our anato mico-pathological researches on catarrh of the uterus, rather than any purely therapeutical or speculative views, have led us to adopt a new medication which alone often proves efficacious after all the ordinary therapeutic means have failed. But we must repeat that it is important, nay, we should say indispensable, to examine into the causes to which the disease is owing—whether it be produced by excessive coition, onanism, syphilitic virus, etc. These circumstances, in fact, being known, certain therapeutical indications naturally present themselves to the mind. When the affection assumes an acute form and is accompanied by considerable reaction, local and general antiphlogistics are at once suggested; but it is not with this form that we usually have to do. It is rather with the chronic, and in such cases local antiphlogistics from the commencement are indicated.

If the catarrh is of an atonic nature, general and local tonic medicaments are to be insisted on. Along with these allow substantial and invigorating food; make use of aromatic and sulphur baths, seabathing; conjointly with these, free exercise in the open air, change of scene, moral stimuli, and the hundred *et ceteras* that will suggest themselves to the mind of the intelligent physician, may be made of very great assistance in the cure of his patient. Locally, tonic and astringent injections, with oak bark, quinine, rhatany, alum, etc., etc.

It has been thought, when these different means have failed to produce the desired result, that it would be useful to throw medicated injections into the cavity of the body of the uterus itself. This method, by no means new, was formerly somewhat in vogue, but had fallen entirely into oblivion,

when M. Vidal (de Cassis) again endeavored to bring it into practice. It does not appear to have answered the expectations of practitioners, as indeed was clearly foreseen by those who possessed correct and precise ideas relative to the seat of the disease against which these means were directed. If you remember what we have said in relation to this subject, you will have no great difficulty in understanding why injections into the cavity of the body of the uterus can be of no avail. The explanation is found in the fact of the seat of the disease being in the neck and not in the body; and that its anatomical element, the follicular apparatus, being more or less profoundly seated in the tissue of the organ, and therefore but slightly accessible to the liquid injected. It is necessary then, if we wish to arrive at more certain results, that our remedies should be directed upon the seat of the disease. Moreover, we declare that, in our judgment, intra-uterine injections ought to be avoided, not so much because they are capable, according to the testimony of some physicians, of producing serious accidents, but rather because they do not attack the true seat of the disease, this not being connected with the internal membrane of the uterus, and are therefore inefficacious. One can easily conceive the inconveniences to which we have alluded. It is no hard matter to understand that stimulating caustic liquids thrown into the uterine cavity may traverse this organ, and pass through the Fallopian tubes into the peritoneum, and there produce the most serious accidents.

M. Vidal (de Cassis) admitted, it is true, the possibility of the dreaded consequences ensuing, which we have hinted at, but contends still for the advantages of intra-uterine injections, and lays the inconvenience and danger which may arise solely to the improper manner in which the application is made. Our *confrere*, however, has modified the mode of injection pursued in the commencement of this practice, and insists that the injection should be thrown up in a slow and gradual manner; that one should not only not use a tube whose calibre entirely fills up the neck, but that

on the contrary, it should be free in order to facilitate the escape outwards of the injected liquid. If these rules are observed the injection cannot traverse the uterus and its tubes, and thus pass into the peritoneal cavity. We will even add that modified and administered as our colleague advises, intra-uterine injections will never be attended by any serious consequences. But it is not from fear of these accidents that we reject the method, but rather from a conviction that it is inoperative in a majority of cases; for not reaching the seat of the disease it can do good only in an indirect manner and in exceptional instances. Experience has taught us the insufficiency of the means proposed by Vidal, and it has done so by directing us to the anatomical element of the disease.

We will suppose that you have a case of uterine catarrh, and that, after having fulfilled the particular indications, examined the etiology and all the phenomena; in a word, that having taken into consideration everything proper to the disease, and used the ordinary list of remedies, the condition of your patient is in no degree amended—what would be the treatment? Our surgical therapeutics, and we wish here to speak only of them, would be as follows: Cauterizations, either with the nitrate of silver or hot iron; incisions, practiced in the cavity itself of the neck of the uterus, in order to destroy the mucous follicles which are the seat of the disease. These means may be used singly or associated together.

Let us now enter into some details on the subject. Cauterization with nitrate of silver is done by passing it over the whole surface of the neck, and all the part which projects into the vagina, when the follicles are the seat of the disease. To do this, you merely use a case armed with caustic of sufficient length to enable you to reach the neck—here you allow your caustic to remain one or two minutes; this being done, you withdraw the substance, and the operation is finished. Practiced in this way, cauterization has never produced serious accidents, either local or general, and the

results have sometimes been satisfactory, or in other words efficacious, though it has very often proved insufficient. If the affection were confined to the superficial follicles the cauterization would be all that was required, and there would be a strong chance, in the majority of cases, of effecting a cure. But if the disease be situated in the follicles lying at a greater or less depth in the substance of the tissue, it is easy to see that the cauterization would be insufficient. It follows, then, that in this case you must go deeper, and it is precisely with this view that we resort to incisions, which reach and destroy the seat of the disease.

When all other means have failed, we resort to incisions. For this purpose the speculum being introduced, we pass into the uterine cavity a bistoury with a truncated blade, narrow and bent. We then make eight or ten incisions, and sometimes more, into the tissue of the neck, the whole length of its internal surface. The instrument acts in pressing from behind forwards, as if we intended each time to withdraw it. These numerous longitudinal incisions should penetrate to the depth of a line, or even two, into the substance of the tissues, so as to arrive at the seat of the disease, and attain and destroy the follicles themselves. The incisions being made, withdraw the bistoury; and we are most generally in the habit of immediately afterwards cauterizing boldly and freely the internal surface of the neck, with a view of cauterizing to the very bottom of the fissures made by the bistoury. This operation, which from the manner in which it is begun appears so formidable and fearful, is usually borne without complaint of much pain. We have even seen women who seemed hardly aware of the operation, or who have only complained of a slight pricking sensation. We have never seen any serious accidents result from the operation. During the first twenty-four hours after it has been performed some women complain of slight pain above the pubis, which is sometimes attended with a slight febrile action; but very often it is not followed by fever at all, and as soon as this transient disturbance has pass-

ed there is always the most perfect calm. We have never seen metritis, peritonitis, or any important lesions of other more distant organs, produced by this operation.

It sometimes happens that there is a discharge of blood the day of the operation, but this is very rarely abundant, though we have seen instances of a true hemorrhage, resulting as was afterwards discovered, from the woman being either in, near, or just through her menstrual period. This you will see is a circumstance calling for the postponement of the operation.

Since we saw the cases to which we have just alluded, our practice is to operate during the intervals of the catamenial flux, and since we have adopted this course, we have not seen a repetition of the hemorrhage. We must add, however, that when we wish an abundant local sanguineous discharge, we must not only not avoid but absolutely take advantage of the menstrual period. Except under circumstances of this kind, it is the better practice to wait till some days after this has passed before having recourse to the operation.

This would be the proper moment to say a few words on the application of this method of uterine incisions to certain obstinate cases of amenorrhœa. Suffice it to say, however, that we have used it several times with success; that it should never be resorted to till all other means have failed; that we have never seen it followed by any serious local or general accidents; and that we shall endeavor to give the question all due attention at some future day; at which period we trust we shall establish that the employment of this means is much more natural and legitimate than would appear at first sight. Moreover, you will have an opportunity of judging of its efficacy and seeing its mode of application this morning, in the case of a woman suffering from an amenorrhœa which has proved rebellious to all the ordinary remedies.

Let us not terminate this lecture without recalling to your minds, that catarrh of the uterus may be symptomatic of different affections either of the neck or the body of the or-

gan, and that these last affections being susceptible of cure, by ordinary means, the catarrh, as a consequence, in its time disappears. But this does not always happen, for the original disease may disappear and the catarrh persist, as if it were the primitive affection. In cases of this description it becomes necessary to have recourse to the means of which we have spoken, and which differ, as is seen, from those employed in ordinary discharges, of a nature different from that which makes uterine catarrh.

We have as yet only hinted at a third method of cauterization which may be of use in the treatment of the affection under consideration; viz: the application of the hot iron. This means can be substituted for the cauterization by nitrate of silver; in fact it should be preferred in cases where the mucous membrane of the uterus offers granulations and fungous growths, which the red iron either destroys or advantageously modifies. But what we have said of the insufficiency of nitrate of silver may be applied also to the red iron, viz: that cauterization alone very rarely effects a radical cure when the disease is seated in the cavity of the neck.

It is now some years since we have resorted to the surgical means of which we have spoken in rebellious forms of uterine catarrh, both in our hospital and private practice, where the efficacy has been witnessed by great numbers of pupils and many of our colleagues, and we can now affirm to you that they are free from danger to the patient from beginning to end, and their employment is nearly always followed by the most satisfactory results.

The details which we have gone into concerning the pathological anatomy of the disease have, we hope, sufficed to convince you that this method is entirely natural, and its results consequently less surprising and inexplicable.

To conclude, our anatomico-pathological labors and clinical researches relative to catarrh of the uterus, have enabled us—1st, to establish the real seat of this affection, which we have shown to exist in the neck; 2d, to indicate the distinc-

tive character of the discharge belonging to the disease; and 3d, and finally, to propose the most rational and most efficacious therapeutical means to be employed in the treatment of this disease.

The bistoury which M. Hugier is in the habit of using, in the operation of incising the inner surface of the neck of the uterus, is of a very simple description, being merely a narrow elbowed blade two lines in width, with a long handle, at and a little before its junction with which the edge of the blade is rounded, while the remaining portion presents a cutting edge, with a slightly blunted point. The only thing which he insisted on the student's remarking was, the very slight angle formed at the elbow or juncture of the two parts of the blade, by means of which form it accomodates itself to the parts and admits of greater facility of use than is offered by a straight bistoury.

For several days past I have been laboring under influenza —called here *la grippe*—which is prevailing in Paris at this time. Velpeau and several other members of the Faculty, from the very tight way in which it has held them, have been obliged to suspend their various hospital duties. Velpeau was so much indisposed that he did not make his usual visit this morning.

Paris, November 30, 1847.

ART. II.—*A Case of Rupture of the Uterus with the escape of the Fœtus into the Abdomen.* By JAMES M. LARKINS, M.D., of Charlotte, Tennessee.

Dr. Hudson, a physician of highly respectable standing in this county (Dickson), was called on the 7th of August last to the house of Mr. N. to see a servant woman. This wo-

man had been in a lingering condition for sometime previous to the doctor's visit, but had suddenly got worse. Neither her master nor any of the family could give a satisfactory account of her condition, and that given by the patient was false, for she denied being in the family way, notwithstanding her husband was living, and she the mother of several children. Her account of the case was this: she said her health had been about as usual until some two or three days before the doctor's visit, when she commenced swelling up so that the abdomen was greatly enlarged; pain in the loins, and frequent calls to make water, but a few drops being passed at any time.

The doctor supposed the case to be one of pregnancy, but on receiving the above information, and from the group of symptoms present, mistook the case for dysuria. An effort was made to introduce a catheter, but as no water passed he concluded that he had failed in the introduction of the instrument. A second physician was now called in, who concurred in the nature of the case; other efforts were accordingly made at the introduction of the catheter but failed in bringing away any urine. The failure now they supposed must have resulted from their having used the gum elastic catheter. I was sent for as having a silver instrument. Frequent attempts were made by Dr. Hudson and myself to draw off the urine, only few drops following each effort. As the patient was evidently sinking we determined to puncture the bladder through the parietes of the abdomen. Previously however to resorting to this last method, we fully satisfied ourselves of the fact that if the patient was pregnant the fœtus was dead. The operation was followed by a discharge of a most abominably offensive matter, a combination of pus and liquor amnii. That night the patient died. Next day the body was examined by Dr. Hudson and myself, when the obscurity of the case was explained. The uterus was ruptured; the head of the fœtus having escaped into the abdomen. From the appearance, the rupture of the uterus had taken place about the seventh month of gestation. The

rupture was in the left angle, between the left Fallopian tube and the fundus; the margins of the rupture were closely constricted around the neck of the fœtus; the head of the child was collapsed, and in a half putrid condition. The parietes of the uterus were very much thickened; the margins of the rupture were fungous; an abscess containing two or three ounces of pus was situated in the right iliac region; every convolution of the bowels was filled with pus of a cream color. The bladder was in a healthy condition, and not distended with urine. The uterus, together with the abscess above mentioned, pressed upon it so that it could not retain the urine when this fluid passed into it. We were not able to satisfy ourselves at the time what was the cause of the rupture, but I have since learned that the patient had taken something to prevent conception. Whether by this procedure she did any injury to the uterus is not known; my opinion of the case is, that the uterus had an ulcer situated in that part which afterwards became ruptured, and as this organ enlarged to accommodate itself to the growth of the fœtus, that part of the parietes being unable from disease to undergo greater distention, a rupture took place. No part except the head escaped through the rent; the body, placenta, and liquor amnii were all retained, and the child died, probably, from the constriction of the walls of the uterus around its neck.

Charlotte, August 8th, 1847.

REVIEWS.

ART. VI.—*New Elements of Operative Surgery.* By ALF. A. L. M. VELPEAU, Professor of Surgical Clinique of the Faculty of Medicine of Paris, Surgeon of the Hospital La Charitè, Member of the Royal Academy of Medicine, of the Institute, &c. Carefully revised, entirely remodelled, and augmented with a Treatise on Minor Surgery. Illustrated by over 200 Engravings, incorporated with the text, accompanied with an Atlas in quarto of twenty-two plates, representing the principal operative processes, surgical instruments, &c. First American, from the last Paris edition. Translated by P. S. TOWNSEND, M.D., late Physician to the Seamen's Retreat, Staten Island, New York. Augmented by the addition of several hundred pages of entirely new matter, comprising all the latest improvements and discoveries in Surgery, in America and Europe, up to the present time. Under the supervision of, and with notes and observations by, VALENTINE MOTT, M.D., Professor of the Operations of Surgery with Surgical and Pathological Anatomy, in the University of New York. Foreign Associate of the Acadèmie Royale de Mèdecine of Paris, of that of Berlin, Brussels, Athens, &c. In three volumes. Vol. I. pp. 914: 1845. Vol. II. pp. 1092: 1846. Vol. III. pp. 1162: 1847. New York: Samuel S. & William Wood.

[CONCLUDED FROM JANUARY NO.—PAGE 60.]

At the conclusion of our last notice, we were on the subject of reclamations.

It has always been our practice, in connection with the press as elsewhere, to speak precisely what we thought without reference to any claims save those of truth and justice. We have had 'an eye single' to these claims, and in defence of them we would 'cavil about the ninth part of a hair.' We flatter ourselves, too, that we have fallen into few errors during

our connection with a public journal; and "we pride ourselves on this," just as Townsend and Mott pride themselves on their ability to write English. Still we are but human, and 'to err is human.' Our freedom from error hitherto, does not render the commission of one less mortifying to us, although it may serve to mitigate punishment. We have now to acknowledge an error of fact in our former paper; and we make the acknowledgment, and are going to make the atonement, with as good a grace as possible—not grudgingly like Townsend, but rather with the serene and majestic magnanimity of "Mons. V. Mott."

As we have said, when our last paper went to press we were discussing Townsend *de reclamationibus*. On what we thought sufficient grounds, we had abstracted with all possible tenderness one of the "many plumes" that decorate M. Mott's "own honored brows," and "affixed it" where we thought "it rightly belonged." We did not "*affix* it *upon* the *names*" of those to whom it rightly belonged, for three reasons: 1, because we did not know their names; 2, because it would have been difficult so to "affix it" if we had; and 3, because we were clearly of the opinion that a "name" with a "plume" sticking "upon" it or in it would not look very well. We had claimed, or rather reclaimed, for the steam-doctors and the Amphictyons of Alabama, the discovery of a "medical university" or "university in medicine." But a friend of ours (whose modesty, second only to M. Mott's, forbids our mentioning his name) curious in such matters, and solicitous for the feathers in M. Mott's cap, has carefully compared dates and satisfied us that we were in error. To "that great surgeon, Dr. Mott," then, *unquestionably belongs "priority" in this "noble discovery."* This "new path" was first "struck out" by him. "We say cheerfully with all our heart, *palmam qui meruit ferat.*"—(Townsend, *de reclamat.*, vol. ii, p. 883.) At the same time it is but just to the Steamers and the Amphictyonic council of Alabama to award to them the "merit of originality in the conception," for they certainly could not have had inkling of Mott's dis-

covery. Whether their "process" for a "medical university" is superior to M. Mott's, we are not able to determine, inasmuch as we are unacquainted with the "details" of either. We shall possibly be able to give an "appreciation" by the time "the second edition" of this "first translation" is published.

Thus we have replaced this "plume" whence we abstracted it, and as we performed the deracination just as gingerly as possible, we are sure it will take root again, will "repullulate," if the principles "of what may be emphatically called *new surgery*" are properly applied. If John Hunter successfully transplanted a cock's spurs into a cock's comb, and if dentists successfully replace teeth they have unwittingly removed, why should not we succeed? Heaven forbid that any mistake of ours should spoil the integral beauty of Mott's plume-crowned head! On the contrary, it shall not be our fault if each one of the "plumes" on "his honored brows" does not out-dazzle that which Alexander wore at the battle of Granicus; it will go hard with us if the head-splendors of "the great surgeon of America" do not vie even with the tail-splendors of the bird of Juno!

And here it is right that we give a caution to all those who may have "reclamations" to make. They must approach the translator in "a respectful" manner; for he is a sort of male Ann Royal with another 'black-book.' They must present themselves to him with a deferential bow; for he is a surgical Warwick, making and unmaking kings at pleasure. They must stand with drooped head and veiled eyes (like the Peri at heaven's gate in Meadow's picture); for he is a new St. Peter, sitting at the celestial portal "of Practical, Operative, and Pathological and Anatomical Surgery" —a self-constituted guardian who, with his flaming sword, warns off and keeps out all those that would intrude themselves into that surgical paradise. We thank our stars for having been able to set ourselves right so soon, otherwise in the "second edition" Townsend would have burst upon us

'Fierce as ten furies, terrible as hell!'

Hear him in a sentence that bears his unmistakeable marks —one that could be sworn to in any court "in any country," Christian or Pagan!

"In conclusion on the subject of *reclamations*, and without deeming it at all necessary to pay the slightest attention to some puerile and insignificant pretensions which have been set forth and vehemently insisted upon in sundry *professed* notices and maudlin criticisms on the two first volumes, we will here barely state, that in a respectful [!] communication transmitted to us from Dr. SAMUEL S. WHITNEY, under date of Dedham, (Mass.,) March 5th, 1846, he claims the honor of having been the first person,—and before Dr. Ruschenberger of the U. S. Navy, to whose communication (see Vol. II of this work,) he alludes,—in this country at least—who clearly diagnosed a case of *unequivocal* aneurism of the *basilar artery*."—Preface, vol. iii, p. vi.

"In conclusion of reclamations" indeed! Why the poor man has not yet seen the beginning of the end! Sancho Panza after being blanket-tossed, and Nick Bottom with his ass's head after being fairy-pinched all night, were not half so sore as will Townsend be before he can get out a new edition. Guatimozin's bed of live coals would be one of eider-down to him. He will be

> "Twixt upper, nether, and surrounding fires!'

Pharaoh, with his flies and frogs, or

> ———'when the potent rod
> Of Amram's son, in Egypt's evil day,
> Wav'd round the coast, up call'd a pitchy cloud
> Of locusts,'—

was not so plagued as must be the translator of this unfortunate book. He need not 'begin to harden his heart' so soon; he must not 'kick against the pricks' that are now pointed at him; he must not cry 'peace, peace! when there is no peace!' He will have the consolation of knowing that all this was brought on by his own superabundant arrogance and pretension—in this wise:

In furtherance of the great end—the *motif*—of this translation—viz: the glorification of "Mons. V. Mott," all unclaimed surgical processes, floating about in the profession, are forthwith seized by Townsend, impounded like so many stray animals, and branded as Mott's—"the *onus probandi*," as Mott himself says in his letter to Liston (vol. ii), "resting with others" or with those who deny his claims. All "the great and master operations" whose originators are unknown, were "first" performed by Mott "in any country," or "in America;" all the "new discoveries and new improvements" not patented, were "created into existence" by the same "incomparable genius;" all the "new paths" not laid down in the charts, were first "struck out" (in backwoods parlance, *blazed*) by the same "great surgeon," directly or indirectly; that is to say, if he did not do all these things with his own hand, he did them by that of his pupils—on the legal principle, '*quinam facit per aliam, facit per se;*' and what he did not thus first do, directly or indirectly, he has done oftener and better than any body else. Take for example the cure of *naevi materni* by cauterization with red-hot needles. This is mentioned six times in the first volume and five times in the second, without including the general index of vol. iii, and "contents" of vols. i. and ii. First we have it as "Dr. Mott's process," in text, "contents," and "general index;" then it is the "American process, as performed by Dr. Mott and others," whose author (although mentioned in vol. ii by Velpeau) our translator in all his "severe researches" has never been able to discover. Then, after Dr. Post in his communication tells him that it originated with the late Dr. Bushe, of New York, he insists that Dr. Mott has performed it oftener, better, and with more success than any body else, and still persists in the table of "contents" to vol. i and ii, and in the general index in the last volume, to call it "Dr. Mott's process!" Thus he 'annexes' everything to Mott. In short, he is determined that his preceptor's "honored brows" shall have "plumes" enough, even though some of them are borrowed.

We were about to leave the prefaces, which we have perhaps *mined* sufficiently (though they are as inexhaustible as an Illinois coal-field) when we saw a new phase given to this translation, a new office ascribed to it. Already it has been presented to us as "an inexhaustible arsenal or armory," "a storehouse," "an edifice," and "a precious treasure," containing in each of these forms

'Quæ sint, quæ fuerint, quæ mox ventura trahantur.'

But we perceive that it is also "a great *organum!*" Here, now, is something very classical, very mysterious, and at the same time something very grand—as Dominie Sampson would say—'pro-di-gious!' What it is precisely, 'must give us pause;' for Townsend, like Master Slender, is afflicted with a certain ambiguity of expression, at times a little inconvenient. Yet as the Welch parson said of Master Slender, 'the faul' is in the 'ort'—'his meaning is good.' At first we thought it might mean Bacon's great work (*Novum Organon*) turned into surgery; but this is too 'far-fetched and fanciful' even for Townsend. Then, M. Mott, in his epistolary preface, evidently regards the original as a great something, whereby he is to be eternized with much ease; he speaks of entering his name as "a *compagnon de voyage*" with the great Frenchman; but whether he considers that they are going down to posterity in an omnibus, a four-horse post-coach, or a steam-car, we do not know. On the whole, this explanation is not satisfactory. Going back then to Townsend, and recollecting the pæans constantly sung by him to Mott, Velpeau, and himself, we are disposed to think he meant to signify here a *musical instrument*—the more so as this is consonant with the most frequent use of the word "*organum*" by classic authors. But this only puts the difficulty a little further off; for it is almost impossible to say whether he meant a flute, fiddle, or flageolet, cornet-a-piston or clarionet, trombone or trumpet, harp, haut-boy, or hurdy-gurdy, bassoon, bass-viol, or bass-drum. It is not easy to determine whether he meant a wind-instrument—such as that wherewith the walls of

Jericho were blown down, or a stringed-instrument such as that wherewith the walls of Thebes were built up. On the whole we incline to the belief that in his quaint way he meant to compare this translation to a *lyre*—like that which Hermes constructed out of a tortoise-shell, and gave to Apollo as a *placebo* for the loss of his cows.

Mott found Velpeau, as 'cow-stealing' Hermes found the tortoise,

'Moving his feet in a deliberate measure'

over the earth, and he cried out, 'a treasure!'

'A useful god-send are you to me now!
* * * * * * * *
You must come home with me and be my guest;
You will give joy to me, and I will do
All that is in my power to honor you.'

Thus talked Mercury (according to Homer and Shelly) two thousand years ago; and thus almost word for word did Mott talk in his letter to Velpeau.

No sooner said than done. Townsend forthwith seized the Frenchman and, "under the supervision of Dr. Mott," murdered him outright—'bored the life and soul out' of him as Mercury did out of his tortoise; then over him stretched his "superadded new matter," as over the tortoise-shell Mercury stretched

'Symphonious chords of sheep-gut rhythmical.'

Thus was wrought 'this lovely instrument' upon which our 'Arcadians,'

'Et cantare pares, et respondere parati,'

alternately have kept up such an eternal clatter. First Townsend 'strook the chords' and

——————'unlocked the treasure
Of his deep song, illustrating the birth
Of the bright Gods, and the dark desert earth;
And how to the Immortals every one
A portion was assigned of all that is;'

but chiefly it is Mott, that "christian and man of science," whom he has

> 'Clothed in the light of his loud melodies.

Then Mott—

> 'He piped the while, and far and wide rebounded
> The echo of his pipings; every one
> Of the Olympians sat with joy astounded!'

No wonder, for Mott fairly 'bangs Banagher'—

> 'Nec tantum Phœbo gaudet Parnassia rupes!
> Nec tantum Rhodope mirantur et Ismarus Orphea!'

Such is the best explanation that we can give of the meaning, origin, and uses of this "great organum."

Thus far with the prefaces. Turn we now to the text, and the labors of our brace of editors. In the form of suggestions, cautions, approvals, doubts, appendices, and "abrègès," the original is as full of "notes" as a sunbeam is of motes. The text is in many places buried under them. Looking at the "general index," we find it quite filled with "Townsend" —scarcely anything else to be seen—the remainder being "Mott"; so that what with the large quantity of Townsend and Mott, and the small quantity of Velpeau, one is irresistibly reminded of Falstaff's two gallons of sack to a halfpenny's worth of bread. These notes are of variable length, from a single intercalated word, to many pages; all of them from the least to the greatest having the writer's signature, though it would be easy enough to recognize them without this. It is curious to observe how these signatures vary according to the variant mood of the translator. Thus, when he wishes to seem particularly modest, when his pride apes humility, we have, by a sort of *diminuendo* movement, plain "P. S. Townsend," then "P. S. T.," then "T.;" then, *crescendo*, "Dr. Townsend," "Dr. P. S. Townsend," and "P. S. Townsend, M.D."—the last being retained for grand occasions, when he is in full feather.

The notes are as variable in subject as in length. Though "confined for the greater part of his life to the practice of medicine strictly so called," Townsend is as much at home in surgery, as if he had been born, baptized, and bred in it. Velpeau, after many years of devotion to it in large hospitals and in private practice, does not speak half so confidently as his translator. The latter is as intuitively wise as the seven h son of a seventh son. No speculation is too subtle, no theory too recondite for him; there is nothing too complex or too simple, too great or too small. His mind is at once telescopic and microscopic, presbyopic and myopic. It takes in the broadest and remotest outlines, it siezes the minutest and nearest detail. His spirit is like Napoleon's,

> 'antithetically mixed
> One moment of the mightiest, and again
> On little objects with like firmness fixed.'

He is profound in aneurisms and poultices, acute in hernia and adhesive plasters; he is voluble on myotomy and tenotomy, exsections and amputations; of peno-plasty, rhino-plasty, episco-plasty, and all sorts of plasty, he talks as familiarly as 'gentle maidens do of puppy dogs;' he is learned in artificial eyes and artificial anus; and while he is admirable on the advantages of cold-water irrigations, he is truly captivating on the virtues of brandy-and-water plain!

Then, what a discursive mind he has! Seutin's dextrine bandage suggests to him "a masked battery!" Galvano-puncture leads him to Morse's Telegraph (which he mentions more than once), and this sets him to prophecying, and also reminds him that "Perkins' tractors" were a "scientific contrivance" and an "American invention"—but whether "used by Dr. Mott and others," as the hot needles in nævi, we are not informed. Starting with Ancell's Essays in the London Lancet on Leibig's chemical doctrines, and his commendation of McIlwain's treatment of tumors, he wanders away off to the painting and sculpture and social life of Greece,

and winds up by explaining to us how first the Greeks and then the Romans became the conquerors of the world. He is present at a severe surgical operation, and in the fortitude which the patient exhibits, he sees the power of religion over the human heart, the special providence of God, and the immortality of the soul! As both the latter passages possess some of his characteristics, especially the "spirit or perspicuity," and the "purity of diction" on which he "plumes" himself, we shall anticipate ourselves a little and quote them here.

"A learned and practical member of our profession, Henry Ancell, Esq., of London, in his report on the Progress of Surgery, (*Ranking's Half-Yearly Abstract of the Medical Sciences*, American edition, New York, 1845, vol. I, p. 222, et. seq.,) and who as one of the earliest illustrators of the great truths unfolded by Leibig, merits the lasting gratitude of the profession, (see his Discourses in the *London Lancet*,) thus speaks in eulogistic terms of the recent work of Mr. McIlwain on Tumors, (London, 1845,) inasmuch as the last mentioned author, evincing that he keeps progress with the advance of modern sciences, boldly, and as we think, truly, maintains that those morbid growths called *Tumors*, whatever be their classification, are to be chiefly ascribed to improper attention to the nature [and quantity he might have added. T.] of our food. On which account, Mr. McIlwain very naturally looks to the *liver* as the direct source of such morbid and abnormal productions. In other words, he ascribes the growth of tumors chiefly to sedentary habits, and the indiscriminate use of alcohol, and greasy, fatty, and saccharine food, because of their superabundance of carbon. *Ab inverso*, the cure or prevention lies in the abstinence from such indulgence and strict attention to exercise and regimen. Hence, says Mr. McIlwain, the inutility of topical applications. He instances even the cure of *cancerous tumors*, by rigid adherence to these rules, which was proved moreover by a return of pain at every transgression of regimen.

"[The faultless forms of organic development, handed down to us in the paintings and sculptures of ancient Greece, while they are speaking memorials of the supreme health which existed among that people, [*Qu. what people?*] receive a ready solution, in the philosophy which governed them

[*the faultless forms?*] in their rules of social life, especially in the cultivation of manly sports, athletic exercises, and games, and free exposure to the open air and adherence to a frugal diet. This made them [*whom?*] and the Romans, successively, so great a military nation, and the conquerors of the world. T.]"

See now into how small a nut-shell is compressed that upon which volume after volume has been written; and how, by implication merely, is solved a question upon which Gibbon wrote his immortal work. That Gibbon should have died of scrotal hernia before our translator lived! That Niebuhr and Arnold, "T.'s" contemporaries, should have died without knowing him!

The other passage occurs in a report of an operation on the jaw. This report, which was "read to and approved of and corrected by Dr. Mott," will come under our notice again.

"The incision upon the carotid was also brought together in the same manner by two or three sutures, and the patient let to remain on the table upon which he had been bolstered up, and where he had been operated upon. Being now, as was to be expected, somewhat pallid and languid, and the pulse greatly reduced in frequency and force, though there was no actual syncope, this was met by a more liberal use of warm wine and water. But he exhibited constantly the same imperturbable calm and resolution which he had during the operation; because he believed, as he said before the operator began, and when he took leave of some of his young friends the day before, upon a higher power than man. It was this serene christian faith and resignation which was the true secret of his incomparable and heroic courage. I have seen such demonstrations, but none of so high an order, on the dying couch, from the same blessed consolation, which none but those who have imparted to them this priceless boon, and through divine grace, can realize or enjoy. And I have often said, that if any thing were wanting to convince me of the power of religion on the heart, and of the constant supervision of the divine Creator over human actions, and the link between Him and the immortality of the soul, it would be these sublime moral spectacles in the hour of overwhelming tribulation and unutterable anguish, and when re-

liance, and hope alone in our Almighty Father, can disarm death and every mortal sorrow of their sting, and make us triumph over every worldly desire and the grave itself.

"The patient recovered perfectly in a few weeks, nearly the whole wound having healed by the first intention.

"P. S. TOWNSEND, M.D."

There! there is "purity of diction," and piety too! Some indeed might call it pious coxcombry, or piety run mad, or a fine specimen of cant written in the 'powerfully-weak' style. But there it is!—a specimen of the "new matter" wherewith four compact octavo volumes of French are swollen, expanded, magnified, augmented, and increased to three huge unwieldy, ponderous, and dropsical ones of *quasi* English. And it is "entirely new"—new in its conception, expression, and location; in short, new in every kind of sense.

Yet are we glad to meet with it. It has solved a question that has sorely puzzled us. We have pondered and pondered and pondered, and then after 'brief breathing time' we have pondered again, beating our dull brains fruitlessly to discover the true vocation of M. Mott's personal friend, pupil, and kinsman. He is no surgeon, that he himself tells us, just to show that he undertook this translation as a work of pure philanthrophy. Physician he cannot be, although he did for a time devote himself "to the investigation of febrile diseases as personally examined and investigated by himself;" for surgery has in these latter days monopolized the entire healing art. Physic is swallowed up in surgery just like 'Death is swallowed up in Victory.' 'Othello's occupation 's gone!' and if it were not, it is very evident that his heart was never in it; he practiced physic, when physic *was*, merely as a means of livelihood, or as a pastime, preferring even to be mischievous rather than idle. The true intent and meaning of the man was therefore what puzzled us. But now we have it, and we are at peace, we shall not be tormented on our death-bed. Townsend should have been a preacher—nay, he *is* a *preacher;* but he ought to be and was intended for a bishop—ay, and an arch-bishop. So strong is the

tendency that here in the translation of a work on surgery his peculiar genius, the divine afflatus, breaks forth with a 'forty-parson power.' No 'melancholy Jacques' is he who merely sees

> 'Books in the running brooks,
> Sermons in stones, and good in everything.'

He is something far better than this. He lives in a higher region.

> ———'His soul is like a star,
> And dwells apart!'

See 'sermons in stones,' indeed! Many of us can do that, but it is given to the few, to the chosen ones, to the 'angels in disguise,' who, clothed in fleshly garments, walk through this 'vale of tears,' as through a place 'where for some sin to sorrow they were cast'—it is given to these only to see in a surgical operation the beauty and holiness of religion! the overruling providence of God! and the link that binds man's immortal spirit to the Great Father of spirits! Our translator is another mournful instance showing how much an accident may make or mar. With eloquence enough in him for a Bossuet and Massillon both together; with Jeremy Taylor's glowing piety and rare fecundity of language; with Tillotson's ease and naturalness; with Barrow's strength and force; with Bunyan's holy zeal and pious quaintness; with Dean Swift's wit and 'pure well of English undefiled'—with that in him

> ———'which might give
> Light to a world, and make a nation live,'

he is engaged in translating, "and with notes," a book on practical surgery. The genial current of his soul was early turned awry—yet see what tremendous efforts it makes to get into the true channel! The god within him has ever had to be repressed—and behold with what a mortal agony he sometimes wrestles with it! Such has been 'inevitable destiny' in his case! Gentle reader! is it not a hard case!

But let us look a little while at the translation. The translator and his sponsor say that "they pride themselves on this." They congratulate themselves that they have achieved it "in a manner not entirely wanting either in spirit or perspicuity;" and then they proceed to make a grand flourish about "purity of diction." Indeed they flourish this on several occasions; it is one of the chief recommendations of the book; the "purity of diction" being so remarkable that the translation "may be deemed worthy, for a long time to come, to occupy a permanent *rank* in the *hands* of every person devoted to" [operative surgery,] "this now-absorbing and most clearly defined portion of the healing art." Nor is this all. They think it also necessary to laud the style of the original, as if that would enhance the value of their labor, or make the translation more deserving of encomium. So that, directly and indirectly, there are three things predicated of this translation: 1, spirit and perspicuity; 2, remarkable purity of diction; 3, indirectly and by way of absurdity, the habitbitual felicitous style" and the "elegant diction" of the *original.*

As it regards the last predicate, it would be easy to prove the contrary without going beyond this translation itself. But if our delectable translator or his sponsor will make us a present of a good copy of the original, any time within a twelve-month, we will undertake to prove our denial from it, to the satisfaction of any French scholar. We are willing, however, to take it for the present at the translator's estimate, as it only makes his own faults less pardonable.

As it respects the first predicate, we have to say in the first place that the whole scheme of the translation is wrong —that the plan is erroneous, and the execution clumsy and unskilful. A distinguished author (Gœthe) says that "there are two maxims of translation, the one requires that a foreign author be brought to us in such a manner that we may regard him as our own; the other, on the contrary, demands

that we transport ourselves over to him, and adopt his situation, his mode of speaking, his peculiarities." When we want matter alone, we select the former; when we want matter and form, we select the latter. And now in the case of the work under consideration, we put it to any man's common sense, if the former is not the proper one? What care we how Velpeau talked? What care we about his manner, his peculiarities? It is the matter, it is *what* he said, that we want; and we want this so presented that we may look upon it as our own, that we may domesticate it, that we may add it to the home-stock. We want Velpeau in the mother-tongue as he himself would write, if he were one of us. But Townsend and Mott pride themselves on having adhered "as closely and rigidly as possible to the original text of the author, *verbum verbo*, even at the risk of appearing, at times, to be speaking in an idiom somewhat Gallican."

At times in an idiom *somewhat* Gallican! We present these three volumes to the reader as *wholly* Gallican all the time! The plan vitiates the whole *ab ovo*.

But even with their own scheme the execution is clumsy and unskilful. They do not seem to have any confidence in their knowledge of French, even while they boast of it; for after translating the most common words and simple phrases, they add the French, in parentheses. The text is everywhere thus interlarded. To say the least, it spoils the beauty of the page, and is therefore objectionable; but it annoys the reader, and throws a doubt over the correctness of the translation. If this had been done only now and then, it might be borne with; but, in the whole three volumes, there is scarcely one single page which is not so disfigured. If it had been confined to instances, many or few, where there could be any reasonable doubt as to the signification given to the words, it might still be borne with; but in a majority of instances the signification of the words is perfectly obvious. To show how this interlardation looks, we present some speci-

mens. We have not selected the *worst*, but have taken short sentences and paragraphs from different parts of each of the three volumes to show that what we have said is true.

"Article I.—Fanons.

"Fanons comprise three principal varieties: 1. The drap fanon; 2. The fanon properly so called; 3. The false fanon.

"§ I. The name of drap fanon, or splint-holder, (*porte-attelle*,) is given to a piece of linen somewhat longer than the fractured limb, and upon which the other parts of the dressing are first laid. Properly speaking, this is a simple alèze, or a napkin, destined to envelop the different objects that are placed about the fractured leg or thigh. In other respects, the use of the drap fanon is easy to understand. If, for example, it is the leg we are treating, we spread out a napkin, deprived of its hem; upon this napkin we place the strips of Scultetus; and upon these strips we place, opposite to the fracture, some long compresses. When these latter are placed upon the limb, and then fastened by the strips of Scultetus, we roll up the lateral splints, from right and left, in the edges of the primitive napkin, or drap fanon; we thus bring each splint, by degrees, up to the distance of an inch from the surface of the limb; the cushions are then introduced between the limb and the splints thus arranged; the cushion and the splint are also placed; and we then fasten the whole by means of circular bandages.

"It is easily conceived, that in treating a fracture of the thigh, the drap fanon must be of much greater length, and also that less length would be required for the arm or forearm.

"Meanwhile, the drap fanon is nothing more than the envelop of linen (*la toile d'enveloppe*) which we sometimes have occasion for in dressings somewhat complicated."

"In this respect, there are, in reality, some advantages in leaving the flap free, after it has been cut. It is then seen to retract (*revenir*) upon itself in the direction of its two largest diameters, to become thicker and firmer, (*se durcir*,) and more and more vascular, and to assume, in fact, some of the characters of the integuments of the cranium, or of the face. When it has become so, we may, without fear, pare (*aviver*) its edges, and fasten them, either by suture or bandages, on the part which is to become their new residence."

"As with the nose, it is the skin of the neighborhood which is to furnish the material for reparation, (*raccommodage.*)

"*First Stage*, (*Premier Temps*).—We commence by excising, shaping, (*régulariser*,) and paring (*rafraichir*) the mutilated border of the ear. We afterwards separate above, below, or at the posterior part of the concha, (*conque*,) the integuments which cover the temple, mastoid process, or subauricular fossa (*échancrure*) in the neck, a little nearer to the meatus auditorius than in a line with the abraded (*avive*) border, but in a direction parallel with this border."

"It results from this, that the new nose, feebly sustained above, sinks down (*s'abaisse*) more than is desirable, shrinks (*se resserre*) into the form of a tumor, and assumes a palish tint, which contrasts (*tranche*) with the rest of the visage. A patient thus operated upon by Delpech, and whom I saw at Paris, had a nose that was wrinkled (*ridé*) and shrivelled *ratatiné*) like a potato, and which a lupus, moreover, finally destroyed."

"*Rhinoplasty by simple Separation* (*Décollement*) *of the Tissues.*—After having separated by dissection the teguments around the deformity, to the extent of half an inch or an inch, it is generally easy to stretch (*d'allonger*) the parts and draw them towards each other, (*d'attirer*,) so as to be enabled to bring them into contact (*les affronter*) by their previously pared edges."

"The dread which prevailed among surgeons of the last century, of wounding the inter-articular (diarthrodiaux) cartilages, exposing them to the air, and touching them with the instrument, is at the present day entirely dispelled. In place of all those precautions formerly recommended in order to avoid the articular surface, which constitutes the bottom of the stump, some modern surgeons go to the extent of advising that it should be wounded expressly. For example, M. Gensoul (*Thése* No. 109, Paris, 1824,) is of the opinion of Richter and Bromfield, that, in scarifying it (la découpant) with the point of the knife, we have a better prospect of cicatrization by the first intention. This practice, adopted also by some surgeons of Paris, and which is attended with no inconvenience, seems, nevertheless, to be sustained upon a position which is far from being demonstrated. In fact, it is incorrect to say, with Béclard and many others, that after amputation in the *contiguity*, [*i. e.*, in the joint, vid. supra. T.] the smooth face of the cartilage does not unite with the

flaps, but remains free even after the final cure, unless by some means or another, inflammation has been excited. This can only take place by exception. Whether the instrument comes in contact with it or not, it nevertheless contracts, and that speedily, firm adhesions with the tissues that cover it; and it is as useless to scrape it with a scalpel as to cauterize it, in the manner practiced in the time of Heliodorus. If the agglutination is not immediate, the cartilaginous surface. acted upon the cellular granulations which are formed upon the bone, soon detaches itself, sometimes in fragments, sometimes in large pieces, (plaques,) at other times in the form of a shell, (coque,) and soon completely exfoliates, leaving exposed a vermilion-colored wound, which afterwards cicatrizes with great facility. In the contrary case it does not perceptibly change its appearance; it only loses its polish and becomes rugose, (rugueuse;) but a molecular action soon develops itself, erodes, (miner,) and insensibly dissolves it, until it has totally disappeared. Constituting the true epiderm of the bones, and consisting of a simple anhiste (anhiste) tissue, it cannot, with the attributes that belong to it, exist any longer than while the articular movements are preserved. As soon as the living tissues rest permanently upon it, (la touchent à demeure,) the vitality of the bones, properly so called, begins to act upon it and to destroy it, by creating the cellulo-fibrous deposition, (couche,) which is the base of every sound cicatrix; unless in its actual state of cartilage, (véritable épichondre,) it becomes agglutinated to the soft tissues, by becoming, as M. Champion thinks, organized and blended with them."

"For superficial carious affections, whatever may be their extent, we confine ourselves to the use of the rasp. Having laid the diseased parts bare by means of the proper incisions, the surgeon, holding the cutting plate (plaque tranchante) of the rasp in his left hand, and embracing its handle with his right hand, proceeds to scrape and grate (grattera) the carious or necrosed surface, until he has completely removed it, and perceives red points (pointillé rouge) and a granular aspect, and no longer a yellow or livid tint, at the bottom of the rasped surface, (la plaque ruginée.)

"In its union with the body of the bone the head of the humerus forms an extremely open angle, (extrêmement ouvert,) and the fibrous capsule is inserted a little upon the inside (en deçà.) In the amputation it is necessary that the

edge of the instrument should describe a circular line exactly corresponding (semblable) to the plane (plan) of the hand, if we desire to separate the fibrous tissues from it with facility."

"Operating on an old man for a sarcoma, I began with a horizontal incision, extending from the left labial commissure to the summit (sommet) of the corresponding mastoid process, and which I transformed into a T incision by means of a vertical one carried down to the great horn of the os hyoides. I had thus two triangular flaps, which I dissected, and turned back, the one in front and the other behind. After having sawed through the bone near the symphysis, I proceeded to detach from it the soft parts behind and underneath. Having raised up the angle of the jaw, and isolated the ramus, (la branche,) I cut through the neck of its condyle with the flat rowel of M. Martin, (j'en coupai le col du condyle avec la molette plane de M. Martin.)"

These quotations are from the first and second volumes. We were about to select some from the third volume, but desisted in mercy to our journal. It certainly never contained in the same space so much of bad translation, even including our own sins in that way, which though few were great. In the third volume, as in the first two, specimens like those we have quoted are as thick 'as leaves in Vallambrosa.' Now in all these instances, if the proper translation has been given there was no need of subjoining the word translated; if the proper translation has not been given, it was the duty of the writer to give it.

As to the "spirit" vaunted by the writer, it is evident that in all the sentences quoted, it is essentially French—the words, many of them, are English, but they are collocated and arranged in obedience to French models. The "perspicuity" claimed by the translator may be allowed in the restricted sense given to it by him, viz:—that the meaning of the author can be gathered from the translation. Yet among the paragraphs just quoted, we think there are some which will puzzle the reader. So, too, the meaning can be gather-

ed from such expressions as "three years of old,"—"surgeons were deterred by it [opening the pericardium] from the fear of wounding the heart,"—"the needle that Scarpa rendered popular, slender, and eighteen inches long;" but certainly the perspicuity is not remarkable. These we might multiply almost to any extent.

With respect to the "purity of diction," we are embarrassed again by the unfortunate ambiguity of the translator. If by diction is meant style, it is sufficiently answered by what we have already said. If, as we suppose, it has reference to the use of English words and idioms in contradistinction to French, the claim is unfounded. If the constant and frequent use of French words as though they were the most common and familiar English, constitutes "purity," then is this translation, notes and all, pre-eminently entitled to be called pure. For everywhere we find *fanon*, *paillasson*, *plumasseaux*, *gâteau*, *ècusson*, *erigne*, *pelote*, *peloton*, *gros*, *boulette*, *bandelette*, *abrègè*, *bascule*, *mêche*, *tente*, *pacquet*, *debridement*, *dècollement*, and hundreds of others, used as familiarly as though they were the best established and best understood words in the vernacular. In fact, a reader unacquainted with the French tongue will have to peruse these volumes with the dictionary in his hands. Perhaps it is this which the translator meant by "an idiom *somewhat* Gallican." In our opinion there is no excuse for this. The French may have some advantages over the English in logical precision of terms, but we insist upon it that in quite all the cases to which we refer, well known and well established words of our language might have been and may be found. We certainly have enough of French incorporated into the language now—Heaven save us from this new influx.

The faults of which we have been speaking exist in still greater perfection in such of our annotator's "superadded new matter" as consists of abridgments of French pamphlets. It is, indeed, in the notes that the peculiar genius of the man breaks forth. There he is unfettered by grammatical rules whether French or English; there he spurns all

control of logic, no matter from which side of St. George's channel it may come. We have already exhibited some specimens of the "American additions" to this translation, and we shall present some more in the sequel.

It is in these notes, too, in "the 1500 hundred pages of entirely new matter," that the chief design of this translation is disclosed, and its true object unfolded. That design was and is to pander to M. Mott's inordinate craving for notoriety. He cannot rest satisfied with his present position; 'admonished by his time of life," he cannot wait the slow process of years; he cannot trust even to a posthumous tribunal, but he attempts to forestall that tribunal. Hence it is that this translation and annotation was undertaken, and that in it Mott's name is never mentioned without a laudatory adjective. The incense of praise is burned under his nose all the time—the censer is never allowed to get cool. No occasion, small or great, is missed; no opportunity allowed to go "unprofited of," to use Mott's language. We have already referred to an instance of this in the matter of nævi materni, where Dr. Bushe's name, as the author of a certain process of cure, was studiously kept back, and where Dr. Mott's was just as studiously brought forward. This is a very small matter indeed; but there are some smaller matters than this. Thus, we are informed with the utmost gravity that "in the opinion of Dr. Mott sponge is a valuable and powerful *absorbent;*" that "Dr. Mott says stramonium leaves, alone or mingled with a bread-and-milk poultice, are a valuable application;" that "Dr. Mott remarks that the great benefit of dressing old ulcers with long strips of adhesive plaster (Baynton's method) is, that these strips give tone to the limb by their mechanical compression, repress exuberant granulations, and thereby promote cicatrization," &c. These are some of the "*discoveries* and *improvements* in surgical processes and principles" which the translator pledged himself to rescue from the "indistinctness into which they were necessarily passing," owing to Dr. Mott's "*repugnance* to self-laudation!"

But we will give another instance, which is a fair specimen. The translator, after informing us we know not how often in the first and second volumes that Dr. Mott was the first man to exsect the lower jaw, goes to work in the second volume, p. 332, to prove it. The section is entitled "claims of Dr. Mott as the originator of exsection of the lower jaw." After gently scolding Cusack and Huston, and growing facetious—we may say, indeed, funny—at their expense, he proceeds to detail at great length, several cases in which this operation was performed by his *magnus Apollo*, M. Mott. This is followed by the "report of a committee" of the New York Medical Society awarding priority to Dr. Mott. Then comes another case, the report of which occupies six and a half pages, and of course is rambling, tedious, and excessively minute. It had already been noticed by M. Mott, at an expense of two pages, in his preface to the first volume; and to make the matter still worse, all that is essential (especially after the previous reports) might be comprized in half a page. In the report (corrected by M. Mott) the writer contrives to inform us *twice* that Dr. Mott was the *first* to excise the lower jaw for *osteo-sarcoma*, (the claim being already whittled down)—adding, that he had then performed it fifteen times; he contrives to inform us *twice* that Mott was the *first* to propose tying the carotid artery in these cases—adding, that he had at that time tied the carotid, in these and other cases, twenty-two times; and he also informs us *twice* that the suggestion of the *curvilinear incision* in operations on the lower jaw is also due to Dr. Mott. Then comes Mott's letter to Liston, in which the former's claim to priority in exsecting the lower jaw is reiterated. And yet when these articles were placed in the second volume, (and at the time some of them were written) both Townsend and Mott knew that the "claims" of the latter were altogether unfounded, so far as the operation on the jaw is concerned! All that he can claim is the suggestion of the curvilinear incision. But it is hoped by this constant reiteration,

this systematic *battologizing* to stifle truth, or to frighten it away; and to get a verdict in Mott's favor as it were by default.

With the same view we are continually regaled with expressions like these—"such men as Morgagni and Mott;" "such great practical observers and surgeons as Dr. Mott himself," (Mott seeming to be a dual noun, or 'a noun of multitude, signifying many'); and now and then refreshed with a splendid burst like the following:

"This belongs in fact to the great department of *Conservative Surgery*, which we have so much insisted upon in our notes in the text of this work, (see under Amputations,) and in which we are fully borne out by the opinions of Dr. Mott, than whom certainly no one could be listened to with greater attention, in what concerns the relinquishment or abridgement of surgical for milder remedies; for who has dealt so largely, and with such brilliant success, in the first-mentioned class of those resources of our art, as that great surgeon?"

It must be acknowledged, indeed, that the translator brought to this part of his labor, a most unbounded admiration for Dr. Mott. It was his "attachment to a long cherished personal and honored friend, preceptor, and kinsman," which suggested to him this translation, and especially this annotation.

But this is no ordinary *attachment;* it is a more than mortal passion. The translator quite forgets *himself* in it; or perhaps his love for Mott springs from his self-admiration—he sees in Mott his *possible* self, what he might have been if his intellectual waters like those of the Croton river had not been dyked and dammed and turned into artificial channels. There is a devotedness about this attachment which "naturally seems marvellous"—a fondness more than earthly, which is a celestial. It is a life-long passion, and, like Apollo's love for Hyacinth, is confirmed by long habit—'*longaque alit assuetudine flammas.*' It is the feeling of youth car-

ried into age, having now youth's fervor, and manhood's earnestness and strength. But Apollo's love for Hyacinth was as nothing to it—

> 'To Phœbus was not Hyacinth so dear,
> Nor to himself Narcissus.'

The old myth of Damon and Pythias is not a type of it. David did not so love Absalom; nor Jacob, Benjamin. Dido did not so love Æneas. It is more like the love of Laura for Petrarch; and yet more like it seems to that of Don Adriano de Armado for Jaquenetta. Like that 'most heroical vassal' our annotator 'affects the very ground, which is base, where [Mott's] shoe, which is baser, guided by his foot, which is basest, doth tread.'

It is very certain that if our annotator brought to this undertaking unbounded admiration for his "respected associate," he likewise brought vast literary abilities. And, as we have just said, it is in the "notes" that his lordly contempt of logic and rhetoric is conspicuous. We have given numerous instances of this sort, in present and previous papers, but it may not be amiss to add a few more. See in the following how 'he draws out the thread of his verbosity finer than the staple of his argument,' to an extent indeed that might astonish his amatory prototype, the 'most gallant, illustrate, and learned gentleman,' Armado; but let no man read it who has not lungs constituted like those of a four-mile horse, or fashioned on the model of a pair of double-bellows, for he does so at his peril.

"Prof. Henderson, of Edinburgh, in his course of Clinical Lectures in that city, (Cormack's *London and Edinburgh Monthly Journal of Medicine*, May, 1843, pp. 443 to 457,) while treating with more clearness and good sense than most writers do, on the subject of Auscultation as a means of diagnosing thoracic and sub-sternal aneurism, as of the aorta and arteria innominata—and more especially after laying down many apparently plausible rules for distinguishing the pure and second sound of the heart, or that of the recoil of the blood in the large vessels upon the semilunar valves,

from that of the murmur of its regurgitation into the ventricle, or of its passage through the aperture of the aneurismal sac—and also after specifying the danger of a false diagnosis from the impulsation of the heart, communicated, for example, through a hepatized portion of the lung, an empyema, (ossific formation and tumors, he could have added,) and that the law, as laid down or discovered by this professor, (as he seems to assert,) that an abnormal interval of time between the diastole of the heart and that of the remote arteries (as the radial, for example,) is a sure diagnosis of regurgitation of blood into the left ventricle, and therefore of incompetency of the aortic valves fully to perform their office, and consequently a proof that an operation for aneurisms of the *arteria innominata*, under such circumstances, must never be attempted—(all of which valuable knowledge, if true, for the surgeon, does not rigidly come within the limits of this work, but rather of pathological surgery, especially in the present imperfect condition of the doctrines of auscultation and percussion,) makes, however, an observation which may properly be inserted within the text of our author, as it has immediate practical reference more particularly, and also furnishes corroborative evidence to the truth of the new principles laid down in the improved mode of treating aneurism, as recently established in a most successful and satisfactory manner by the surgeons of Dublin."

The reports of operations in these volume are quite all specimens "of a diffuse or verbose amplification." We have already quoted the pious and pathetical peroration of one of of them, and we may make one or two more quotations from it. It should be remembered that this report especially was "read to, approved *of*, and corrected by Dr. Mott."

"About a year since his uncle (present in the room after the operation) told me Mr. Baker complained of pain in the right side of the lower jaw which soon began to swell and so continued until it reached its present magnitude—being apparently a uniform enlargement of the whole of the middle part of the base of the jaw on that side which, with the induration of the superincumbent tissues, periosteum, aponeurosis, fasciæ, and muscles, give it to the eye and feel the form of a spindle-shaped, hard, consolidated, and apparently almost boney or semi-cartilaginous tumor throughout, per-

fectly unyielding to pressure, and about *three inches* through in its transverse diameter, or that through its middle, and *five to six* inches in its longitudinal diameter or that in a line with the base of the jaw, tapering each way as it reaches the angle of the jaw at one end and near the symphysis of the chin at the other."

We like to be particular; and we are really at a loss to know whether Baker first had a pain in his jaw a year previous the operation, or whether the reporter first heard of it through the uncle a year previous to the operation. Then, passing over some minor matters, we would be pleased to know the antecedent to the relative *which*, the subject of the verb *give*, and the precise shape of the "tumor" after it gets through with its peculiar mode of "tapering." We are "the more particular" in these matters as the report from which we quote is a part of that "precious treasure for all future time," which the student is to "peruse and re peruse" unceasingly — to 'keep a keeping-on at it,' like the man's wife did 'at' scolding.

Dr. Mott, we are next informed, "pronounced this case to be one of the same kind as the twelve to fifteen others *for* which he had operated *upon* during the last twenty-six years"—a mistake of three years, by the way, but let it pass.

"He [the uncle] had never known him in fact to have suffered from any disease, and he had never had any affection whatever, except that some months back he had been attacked with a slight *erysipelatous inflammation* in one of his legs—I think he said in the calf, which, however, soon subsided without ending in suppuration or ulceration as one might have imagined it would have done, as a natural drain in a person like this patient evidently inclined to a rather gross and plethoric habit."

Without noticing the beautiful confusion of tenses and moods and pronouns in this little sentence, it is respectfully submitted that no man has a right to trifle with his readers as we are trifled with here. What business had the narra-

tor to say anything about the calf of the man's leg, unless he knew that the inflammation had been seated in the calf? What right had he to *think* about it at all, when certainty was required and was within his reach? As it stands he might as well have said 'in a horn,' or 'in a spoon,' so far as information is concerned. We are glad, though, since he would say, "I think he said in the calf," that he got into a difficulty with the next word, *which*. Your relative pronoun is a precious ugly neighbor.

Next we may give from the same report a very lucid specimen of "pathological and anatomical surgery"—we know not what else to call it.

"I asked him particularly if the erysipelas had ever attacked his face and head in the form of *St. Anthony's fire* as as I could readily conceive that in the form of *angioleucite*, involving, as it does, the thick, muscular, and aponeurotic and periosteal tissues and the bones themselves at the base of the cranium, causing distressing pain and tension of those parts, this serious variety of erysipelas (so well described by M. Velpeau in vol. I of this work) might result, especially when abundant sanguinous and cathartic depletion had not been made use of, in precisely such a disease as this osteosarcoma."

A few pages back we took leave of the prefaces, but we cannot resist the temptation to give here, by way of variety, two more quotations from them. The first is from the preface to vol. i. The writer is speaking of his "concluding American appendix:"

"In that also we have endeavored to do full justice to our own countrymen, for all they have contributed in [Qu. *to?*] this great department of surgery; and it is with pride we say, that they have not been behind-hand in following the example of our trans-atlantic brethren of France. Germany, and England. Two communications of this nature, of a very instructive character, have been inserted in that Appendix from Drs. Watson and A. C. Post, both surgeons of the

New York hospital. We have also in that Appendix drawn copiously from the recent valuable works of MM. Serre, Malgaigne, Pancoast, Mütter, etc."

Will somebody please to tell us if Serre and Malgaigne are "our countrymen?" 'Misery makes strange bed-fellows;' and certainly, miserable writing does no less.

The other quotation is from the preface to vol. iii. The writer is speaking of medical cliniques:

Dr. March, an esteemed Professor in the Medical College of Albany, claims priority on this subject—by a year or two in advance of Dr. Mott. We are ready to concede to him all the praise he is thereby entitled to. But we will observe, that so far as public attendance and surgical operations, and medical prescriptions for the out-door poor soliciting advice at hospitals, dispensaries, etc., goes, the matter of *Cliniques* (applied in an inverse sense to the truth so far as the etiology of the word or *bed-side* practice is considered,) is quite an old affair all over the world, having been in common vogue for a century, or for half a century at least."

We are almost disposed to stop, and to waste no more paper on an author who writes *goev* for *go*, *common vogue* for vogue, and who does not know the difference between *etiology* and *etymology*. This is quite as bad as mistaking a *punk* for *spunk*, and writing Physick's name without the *k*, through two volumes.

We have presented our translator under several aspects, in all of which we are satisfied that he was admired——by himself, if by no one else; but we have now to present him as an operator. Though professedly and confessedly no surgeon, he occasionally assumes the surgeon's office, just as sometimes a man 'assumes a virtue though he has it not.' In the instance to which we allude, he operated on a bursal tumor. To his account of the operation he has given something of a dramatic turn quite peculiar to himself. We quote from the "third and last volume;" he has previously spoken of

these tumors and his *peculiar* mode of operating several times—so often that he himself has become ashamed, and apologizes for mentioning them again. For us this apology was unnecessary—we supplied it. We perfectly understand the amiable disposition that our translator has to magnify the little, to exalt the mean, to raise the low, and to support the weak. Though certainly capable, as we have said, ("vid. supra,") of comprehending with equal ease 'all things both great and small,' he has a decided proneness, a proclivity, to look at small things through the same glasses which he looks through at M. Mott—and these glasses magnify enormously. But to the operation, which he calls *écrasement*, or in the mother-tongue crushing or percussion. It will be admitted, we think, that bursal tumors stand no sort of chance with him, that he is 'on' them what some doctors are 'on fits.'

"Thus have I perfectly succeeded in a large olecranal *bursa*, which had been growing for a year or more in H., a healthy mulatto (part Indian and part white) of sound constitution and good habits, and aged about 35. The patient, who was confidential porter of a distinguished mercantile firm of this city, finding the tumor at length had attained such dimensions, being oval shaped and of the size of a small hen's egg and exceedingly tense, though elastic, as to give a considerable degree of pain and annoyance in the use of his arms in hoisting and carrying boxes and bales of goods. He had imagined his arm would have to be *amputated*, and having promised, if it should be found necessary when I should examine it, (for I had not yet seen it,) that if so serious an operation as amputation should be required it should be performed, I sent word to him to call upon me, and in that event I would give him a note to an eminent surgeon, who would do it at his clinique at the University. Immediately on looking at it I perceived it was nothing more than a bursal tumor, and as there was nothing to prevent proceeding at once to the mode of cure I have mentioned, I asked him to stretch his arm out in pronation firmly upon the table, and to turn his head away. Having at this time purposely in my hand a heavy quarto volume which I appeared to be engaged in perusing, I suddenly came down upon the enlargement with it, holding it in both my hands, with all my force, from an

elevation of three feet, striking such a blow upon it as dispersed in an instant every vestige of disease. To the patient it naturally seemed *marvellous;* and in fact would have appeared to be such in the eyes of most persons out of the profession. If an operation of this kind, so instantaneous, so bloodless and painless too, it may be said, (for the pain is but momentary.) and yet so radical in its total extirpation of the disease, was known to the school of Esculapius, we cannot wonder why the ignorant, marvel-loving, superstitious multitude, before whom this master spirit could have turned such skill to a valuable account, (by momentarily taking the patient for a few instants out of their presence,) should have deemed him more than mortal, and built altars and temples to his honor.

"Far be it from the writer of this, however, to glorify himself on such an achievement, so long as its common utility and the facility with which any person may perform it, are so obviously sustained on the plain principles of common sense."

Of course not—he, the most modest of translators, annotators, and reporters! Yet if 'we who have free souls' should "momentarily" put the crown on him "for a few instants," let him not, like Cæsar on the Lupercal, thrust it aside. The second sentence, like its author, and his townsman, the great Andrew Jackson Allen, 'is itself alone.' The third sentence is a fine specimen of the writer's "perspicuity" in its enlarged sense, viz: purity, propriety, and precision. The fourth gives us "T." preparing for action; the fifth presents him in full action: both are worthy the profoundest study of the young surgeon and the young artist. The uncertainty whether the operator grasped the book with all his force, or brought it down with all his force on the tumor, will give room for the exercise of ingenuity. Instead of a heavy quarto, which may not always be at hand, it is suggested that one of the three volumes of this translation may be used, as they *will* always be at hand. Though not quartos, they are—to use one of the translator's expressions—the "ugliest kind" of octavos, and will prove quite *heavy* enough. In the seventh sentence we cannot determine whe-

ther the writer wishes to say how Esculapius did humbug, or how he might have humbugged, the people of his day. Taking the former meaning, a question suggests itself: whether it be possible that by metempsychosis the soul of Esculapius now inhabits the body of P. S. Townsend? It is an awful question, after all that we have said!

So much for the translator. '*Superat pars altera curæ*' —viz: "Mons. V. Mott," that eighth wonder of the world,

> 'Quel grande alla cui fama è angusto il mondo,
> Per cui Townsend ebbe in terra amor celeste.'

We need not occupy much time with him here. He is to be held responsible for all the offences perpetrated in this book, including the high-wrought panegyrics on himself (his repugnance to *self*-laudation being extreme) on the same principle that Townsend gives him credit for certain operations and processes—'*quinam facit*,' etc. The translation was suggested by him, it was executed under his eye, and partly by his aid, and moreover it inures to his benefit. Whatever faults (*if any*) the work has, belong to him—they are his by adoption—they "meet with his entire sanction and approval." If he should object to such a pack of sins as Townsend has fastened on him—a pack far greater and more burdensome than that of Bunyan's pilgrim—he will at least not object to carry his own pack, he will not attempt to shuffle it off his shoulders.

In our first paper, we presented some extracts from Dr. Mott's *epistolary* preface which was one of the chief attractions of the first volume, and the only production of his pen contained in that volume. We go now to the second volume, wherein we find "the detached fragments of the scaffolding of that extended work" abandoned by M. Mott. We present first some fragments from his "own special chapter on Aneurism," marking with italics that to which we desire to call attention. The writer is speaking of the *primitive carotid:*

"We were present at Sir Astley Cooper's second attempt to tie this artery, and the issue was fortunate. Dr. Wright Post was *also* the first who succeeded in this operation in this country. I have tied the primitive carotid for aneurism, and for various other purposes, TWENTY-THREE times, *most of which*, all in fact, but two, have terminated favorably. Two of these *cases* were *for* nævi materni, i. e., aneurism by anastomosis, one an infant of three, and the other of six months, and in both a radical cure of the disease was affected."

That is one fragment of this "precious treasure for all future time." We could not blame a "student," however, that should object "to peruse and *re*-peruse" such an awkward sentence. Here is another fragment:

"There is the best ground for hope that the *ligature* on the common carotid upon the cardiac principle, will continue to be a very successful *operation*, in consequence of *its* giving off no branch whatever throughout the whole length of *its* trunk, a most curious, interesting and important fact."

Very curious, indeed; no matter whether it refers to the "ligature," the "common carotid," or the "operation." M. Mott sometimes gets indignant, and then he vents his indignation after this manner:

"The extravagant, depletory, and starving *system* of Valsalva, in aneurisms, and of other practitioners for other diseases, *deserve* to fall, as *they* are doing rapidly, into disrepute."

"It is one thing," says M. Mott, "to describe, and quite a different thing to perform, an operation"—which oracular saying may be thus exemplified:

"The brachial or humeral, from its superficial course, first along the inner edge of the coraco-brachialis, and then the inner edge of the biceps, *makes a ligature* upon it an easy *operation* to a very ordinary surgeon."

Let us go now to the third volume, and see if M. Mott, since the first two volumes were published, has improved any in his felicitous manner of expressing himself. We find seven pages of concluding remarks gracefully winding up "this first American edition," and to these seven pages our attention is especially directed in the preface. The improvement hoped for, will not be found.

"I regret that the knowledge of myotomy we now possess was not at that time understood, for I am persuaded, that if I had then known as much of the benefit of dividing or excising muscles and tendons, *which we now have*, I might have restored this interesting young lady."

But enough—we fear that the reader who has accompanied us through two papers, and has not forsaken us this far in the third, is wearied. We could go on for many pages—we had almost said forever, and then not exhaust these volumes; but sooth to say we grow tired ourselves, and, what is far worse, have become so infected by bad examples that we are in danger of falling, and perhaps have fallen, into some of the very errors that we have been reprobating. It has given us no pleasure to do what we have done, or to say what we have said, especially so far as M. Mott is concerned. On the contrary, we have felt humiliated. It so happens that his name is the first American surgeon's name that we ever saw and recognized as such in an European work. This was a good while ago, before we touched even the threshold of medicine; but we recollect how leaped our heart at seeing the name, with what a glow of pride we looked at it. It was not then *M.* Mott, nor *Mons.* V. Mott; it had no French frippery or trappings of any sort about it;—*M.* Mott had not then *traveled*, had not yet learned to 'lisp and wear strange suits,' had not yet become sophisticated;—but it was plain *Mott*, like as the name of one long and well known in surgery, like as the name of one throned in the hearts of surgeons. Is it not then humiliating to see one

whom we learned to regard as so justly distinguished, stoop from 'his pride of place' so low as he has here stooped? We look upon these volumes as the veriest piece of literary and professional quackery that has ever issued from the American press. This is strong language and it may be bold language, but it is also true.

Does the reader yet know, after all that we have said, what he will find in these volumes? We will tell him; but first we will tell him what he will not find. He will *not* find in the translation, from the title-page of vol. i. to "finis" of vol. iii. inclusive, one single page—certainly not three consecutive pages—of good English; he will *not* find in the "notes," in the "American additions," three consecutive *sentences* of *decent* English—and we doubt if either of the annotators can write three such consecutive sentences. But he *will* find the worst translation that *we* have ever seen; he will find worse offences than any we have pointed out against all canons of good taste, against all rules of grammar, all principles of logic, all precepts of rhetoric; above all he will find everything that Mott has ever done, and some things he did not do, detailed at full length, and repeated again and again, and inserted in all possible places and in some where it would not seem possible; he will find the celebrated Mott claiming for himself "priority and originality" for certain processes and the modification of processes, just as if he were claiming priority and originality for some modification of a patent washing-machine, a corn-sheller or a sausage-stuffer; he will find, as we have found, a good book prostituted to the advertising of what Mott has done in order to show what Mott may do! And now that one, who has had the boldness to undertake what Mott has undertaken, and the skill to accomplish what he has accomplished, should even wink at, much less aid, abet, encourage, and sanction what we have named—is it not monstrous! But we are repeatedly told that M. Mott felt that all this was due as much to his country as to himself. Wonderful man that has such a coun-

try to interest itself in him! Wonderful country that has such a man in whom to interest itself!

'O fortunatam *nimium*, sua si bona *nórit*!'

It is confidently asserted that no practitioner or student can possibly do without this work. The practitioner will find it useful; and so will the student, if by student is meant one who has finished the curriculum of studies in medicine and surgery. But this concession applies only to the book as it came from the hands of Velpeau. The translator and his "respected associate" have done all in their power to destroy its *original* usefulness. No man, who has not the book before him, can conceive of the immense mass of crude, undigested, irrelevant "notes" that they have added. They seem to have opened all the pigeon-holes about their office, and scattered the entire contents, helter skelter, through these volumes, trusting that by some sort of affinity like would cleave to like. The edition from which they translated was published in 1839. Does any man in his senses, or one indeed a *little* out of his senses, believe that it required, or would require, fifteen hundred pages to state every thing of value that has occurred in surgery during the last seven years, even including the "discoveries" and "new improvements and views in surgical processes and principles" of "Mons. V. Mott?" Five hundred pages—nay, three hundred—would be amply sufficient. To make out the fifteen hundred pages, we have case after case copied entire, heading and all, from medical journals; we have abridgments, or, in the *lingo* of the two annotators, "abrégés," of long-winded discussions at the French Academy; we have copious quotations from the journals of the day; and we have reports of cases, with that most useless of all things, a detail of symptoms as they appeared day after day, for weeks, at morning, noon, and evening visits. "A *systematized* treatise" on the elements of operative surgery, is, to be sure, a beautiful place for all this! Had Velpeau no misgivings when he demurred to the inquiry as to whether he intended publishing

a new edition? It was necessary, however, to do something to make the book correspond with the *solecism* of the title-page touching "*entirely new* matter." Does the republication of cases reported by or for M. Mott twenty and thirty years ago (all that possessed any importance having been noticed in the text by Velpeau) come under the head of entirely new matter? What if other American and all the English surgeons were to do the same thing? Our annotators do not know that a 'great book is a great evil.' They seem to think that the value of a book increases with the size and weight. They are like the foolish bird, in the Spanish fable, which thought the pumpkin a better fruit than the grape, because forsooth it was larger! We commend the moral of the fable to them—to Townsend especially, as he may have read it somewhere "in the West Indies:"

'Grande es, si es buena, una obra;
Si es mala toda ella sobra.'

C.

ART. IV.—*Account of a new Anæsthetic Agent, as a Substitute for Sulphuric Ether in Surgery and Midwifery.* By J. Y. SIMPSON, M.D., F.R.S.E., Prof. Mid. Univ. Edinburgh, &c.

Professor Simpson has introduced to the profession a new agent for inducing insensibility, which bids fair to supersede the ether, and to become a prominent article of the materia medica. Our own experience enables us to speak most favorably of this new anæsthetic agent, and we avail ourselves of all the space at our disposal in this number of our Journal to communicate the results of Professor Simpson's experiments with it. We have inhaled the chloroform ourselves, and administered it to a number of our friends; it has been applied at the Marine Hospital, in a case of delirium tremens, and by Professor Gross in several surgical operations; and uniformly, thus far, its action has been found all that could

be desired. We shall have more to say on the subject in our next number, and meantime make room for Prof. S.'s account of this interesting discovery:

"From the time at which I first saw ether inhalation successfully practiced in January last, I have had the conviction impressed upon my mind, that we would ultimately find that other therapeutic agents were capable of being introduced with equal rapidity and success into the system, through the same extensive and powerful channel of pulmonary absorption. In some observations, which I wrote and published in February last, relative to the inhalation of sulphuric ether in midwifery, I stated that, in several obstetric cases, I had used ergot of rye in this way, along with ether.—*See Monthly Journal of Medical Science*, pp. 724 and 795. Case of Successful Inhalation of Opium, to Arrest the Vomiting of Pregnancy.

"With various professional friends, more conversant with chemistry than I am, I have, since that time, taken opportunities of talking over the idea which I entertained of the probable existence or discovery of new therapeutic agents, capable of being introduced into the system by respiration, and the possibility of producing for inhalation vaporizable or volatile preparations of some of our more active and old established medicines: and I have had, during the summer and autumn, ethereal tinctures, etc., of several potent drugs, manufactured for me, for experiment, by Messrs. Duncan, Flockhart, & Co., the excellent chemists and durggists of this city.

"Latterly, in order to avoid, if possible, some of the inconveniences and objections pertaining to sulphuric ether,—(particularly its disagreeable and very persistent smell, its occasional tendency to irritation of the bronchi during its first inspirations, and the large quantity of it occasionally required to be used, more especially in protracted cases of labor,)—I have tried upon myself and others the inhalation of different other volatile fluids, with the hope that some one of them might be found to possess the aduantages of ether, without its disadvantages. For this purpose, I selected for experiment, and have inhaled several chemical liquids of a more fragrant or agreeable odor, such as the chloride of hydrocarbon (or Dutch liquid), acetone, nitrate of oxide of ethyle (nitric ether), benzoin, the vapor of iodoform, etc. I have found, however, one infinitely more efficacious than

any of the others, viz: chloroform, or the perchloride of formyl, and I am enabled to speak most confidently of its superior anæsthetic properties, having now tried it upon upwards of thirty individuals. The liquid I have used has been manufactured for me by Mr. Hunter, in the laboratory of Messrs. Duncan, Flockhart & Co.

Chloroform was first discovered and described at nearly the same time by Soubeiran (1831), and Liebig (1832); its composition was first accurately ascertained by the distinguished French chemist Dumas, in 1835.—See the *Annales de Chimie et de Physique*, vols. xlviii., xlix., and lviii. It has been used by some practitioners internally; Guillot prescribed it as an anti-spasmodic in asthma, exhibiting it in small doses, and diluted 100 times. (See Bouchardat's *Annuaire de Therapeutique*, for 1844, p. 35.) But no person, so far as I am aware, has used it by inhalation, or discovered its remarkable anæsthetic properties till the date of my own experiments.

"It is a dense, limpid, colorless liquid, readily evaporating, and possessing an agreeable, fragrant, fruit-like odor, and a saccharine pleasant taste.

"As an inhaled anæsthetic agent, it possesses over suphuric ether the following advantages:

"1. A greatly less quantity of chloroform than of ether is requisite to produce the anæsthetic effect; usually from a hundred to a hundred and twenty drops of chloroform only being sufficient; and with some patients much less. I have seen a strong person rendered completely insensible by six or seven inspirations of thirty drops of the liquid.

"2. Its action is much more rapid and complete, and generally more persistent. I have almost always seen from ten to twenty full inspirations suffice. Hence the time of the surgeon is saved; and that preliminary stage of excitement, which pertains to all narcotizing agents, being curtailed, or indeed practically abolished, the patient has not the same degree of tendency to exhilaration and talking.

"3. Most of those who know from previous experience the sensations produced by ether inhalation, and who have subsequently breathed the chloroform, have strongly declared the inhalation and influence of chloroform to be far more agreeable and pleasant than those of ether.

"4. I believe, that considering the small quantity requisite, as compared with ether, the use of chloroform will be less expensive than that of ether; more especially, as there

is every prospect that the means of forming it may be simplified and cheapened.

"5. Its perfume is not unpleasant, but the reverse; and the odor of it does not remain, for any length of time, obstinately attached to the clothes of the attendant,—or exhaling in a disagreeable form from the lungs of the patient, as so generally happens with sulphuric ether.

"6. Being required in much less quantity, it is much more portable and transmissible than sulphuric ether.

"7. No special kind of inhaler or instrument is necessary for its exhibition. A little of the liquid diffused upon the interior of a hollow-shaped sponge, or a pocket-handkerchief, or a piece of linen or paper, and held over the mouth and nostrils, so as to be fully inhaled, generally suffices in about a minute or two to produce the desired effect.

"I have not had an opportunity of using chloroform in any capital surgical operation, but have exhibited it, with perfect success, in tooth-drawing, opening abscesses, for annulling the pain of dysmenorrhea and of neuralgia, and in two or three cases where I was using deep and otherwise very painful galvano-puncture for the treatment of ovarian dropsy, etc. I have employed it also in obstetric practice with entire success.

"The lady to whom it was first exhibited during parturition, had been previously delivered in the country by perforation of the head of the infant, after a labor of three days' duration. In this, her second confinement, pains supervened a fortnight before the full time. Three hours and a half after they commenced, and, ere the first stage of the labor was completed, I placed her under the influence of the chloroform, by moistening, with half a teaspoonful of the liquid, a pocket-handkerchief, rolled up into a funnel shape, and with the broad or open end of the funnel placed over her mouth and nostrils. In consequence of the evaporation of the fluid, it was once more renewed in about ten or twelve minutes. The child was expelled in about twenty-five minutes after the inhalation was begun. The mother subsequently remained longer soporose than commonly happens after ether. The squalling of the child did not, as usual, rouse her; and some minutes elapsed after the placenta was expelled, and after the child was removed by the nurse into another room, before the patient awoke. She then turned round and observed to me that she had "enjoyed a very comfortable sleep, and indeed required it, as she was so tired, but would now be more able for the work before her." I eva-

ded entering into conversation with her, believing, as I have already stated, that the most complete possible quietude forms one of the principal secrets for the successful employment of either ether or chloroform. In a little time she again remarked that she was afraid her "sleep had stopped the pains." Shortly afterwards, her infant was brought in by the nurse from the adjoining room, and it was a matter of no small difficulty to convince the astonished mother that the labor was entirely over, and that the child presented to her was really her "own living baby."

"Perhaps I may be excused from adding, that since publishing on the subject of ether inhalation in midwifery, seven or eight months ago, and then for the first time directing the attention of the medical profession to its great use and importance in natural and morbid parturition, I have employed it, with few and rare exceptions, in every case of labor that I have attended; and with the most delightful results. And I have no doubt whatever, that some years hence the practice will be general. Obstetricians may oppose it, but I believe our patients themselves will force the use of it upon the profession. I have never had the pleasure of watching over a series of better and more rapid recoveries; nor once witnessed any disagreeable result follow to either mother or child; whilst I have now seen an immense amount of maternal pain and agony saved by its employment. And I most conscientiously believe that the proud mission of the physician is distinctly twofold—namely, to alleviate human suffering, as well as to preserve human life."

The following is an eligible formula for preparing the chloroform:

"℞ Chloride of lime in powder, ℔iv.
Water, - - - ℔xii.
Rectified Spirit, - - f ℥xii.

Mix in a capacious retort or still, and distill as long as a dense liquid, which sinks in the water with which it comes over, is produced."

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

On the Convulsive Affections of Infants and Children. By MARSHALL HALL, M. D., F. R. S., Foreign Associate of the Royal Academy of Medicine of Paris, etc., etc. (Read before the Medical Society of London, May 17th, 1846.—I need not inform the members of this venerable society that I have been for many years engaged in an investigation of the nature and physiological application of a certain principle of action and series of phenomena in the nervous system, which I have designated excito-motor and reflex, and limited to the spinal centre, with its associated incident and reflex nerves, exclusively of the cerebral and ganglionic systems.

But it *is* necessary to state that the subject of this investigation has *practical* application to the diagnosis, pathology, and treatment of a certain class of diseases in which a tithe is not yet known.

It is a specimen of this application of physiological science to practice, to which I now beg to call the attention of this Society, the members of which will, I am persuaded, receive in good part the observations and suggestions which I am about to lay before them. It is lamentable to observe the general supineness of the profession in regard to improvements which require a little unbiassed attention—a profession, the objects and aims of which are so elevated and noble, but of which the welcome of new scientific truths must be admitted to be tardy, and the approbation niggard. In medicine alone, improvement is without recompense.

But science ought to be pursued for its own sake, irrespec-

tive of consequences, and the reward should be in the conscience. It is with these views that I beg, this evening, to submit to this Society the following observations on the nature of the convulsive affections of infants and children,—observations which are the first—or amongst the first—of a series of contributions from *the Science of Physiology to the Art and Practice of Medicine.*

It has long been the habit of the indolent in our profession to decry physiology, and especially experiment. I will venture to affirm, that such persons are incapable of grasping the question I am about to discuss—viz: the nature, diagnosis, and treatment of convulsive diseases and their effects. The greater part of this question is involved in the recent investigation relative to the excited reflex actions, and he who has not witnessed, or whose eye is not familiar with, these phenomena, as displayed in experiments, is utterly unprepared to comprehend, and to treat adequately, the class of convulsive diseases. Books cannot convey this knowledge. Books do not contain it. We have only to read the attempts to apply the principle of the excited reflex actions to practice, even by those who might seem to know something of the matter, to perceive the utter insufficiency of book-knowledge for this purpose.

No. He who would conscientiously perform his duty as a physician, in these affections, must submit to the drudgery, often fraught with pain, as well as toil, of reading the book of Nature. He must have both his eye and his mind tutored to distinguish between the effects of volition, and the phenomena of emotion, and the reflex actions of the excito-motor power.

With an eye so tutored, there is no danger of mistaking the phenomena of convulsive diseases. All is plain, simple, useful. The practical physiologist, the physiological physician, sees, that strabismus, the contracted finger, the contracted toe, are one and the same kind of affection, in different parts of the muscular system; that the partial closure of the larynx, inducing laryngismus stridulus, and the total closure of the larynx, suspending the respiration; that strangury and tenesmus, are of the same nature, only seated in other and more vital or important organs; lastly, that the general convulsions of the face, and of the general frame, are still similar morbid phenomena, differing only in their degree of diffusion and intensity, and in being of centric origin. He perceives that it would be as unphilosophical and unreasonable to think and speak and treat of the condition of the larynx separately,

and to view the case as one of partial paralysis, or of inflammatory action, as so to view the affection of the muscles of the eyeball, the fingers, or the toes, which differ in no respect from that spasmodic affection of the larynx, except in their less formidable import.

To the eye of the practical physiologist, and to no other, the *series* of symptoms in convulsive disease presents fearful *excited*, *reflex* actions in the human subject. *He* sees how peculiar and specific they are in their character, and how peculiarly and specifically they are connected with the true spinal system, anatomically and physiologically. In a word, *he* alone possesses the secret cipher by which this mysterious page of Nature may be read. We might as well pretend to understand fever itself from books, as physiology, with its practical applications. Such is the nature of practical physiology; such the inconsiderate folly of those who, in the present day, as in the day of the immortal Harvey, decry wise, judicious, well-devised experiments.

The time is coming—though it may yet be distant—when the "mere practical man" will be viewed as the mere empiric, which he is, in fact; and when to know the nature and modes of action of the springs of life will be accounted the appropriate preparation for the investigation, prevention, and treatment of diseases.

If I wished to set forth, in the most vivid manner, the great reality and importance of the recent progress in our knowledge of the nervous system, and its influence on pathology and practice, I should appeal to the condition of medical opinion on the subject of the convulsive diseases of infants and children twenty years ago and at the present time. Cerebrum was confounded with spinal marrow; the sympathetic explained everything, and yet, as Professor Muller has sarcastically observed, nothing. Even recently, it has been a question whether the symptom termed laryngismus, though forming a part of a general convulsive or spasmodic affection, and being of a transitory character, be of the nature of paralysis or of spasm!

§ 1. SUBJECT OF INVESTIGATION.

There is no more terrible disease than infantile convulsion —none more deplorable in its consequences to mind, or limb, or life; for the little patient may remain an idiot, or a cripple, or the subject of future epilepsy, even should life be spared. Well, then, does this theme merit the attention of this Society.

The first question which presents itself is—What are the causes or sources of infantile convulsive affection?—in what modes are such affections induced?

The second question is—What are the precise forms assumed by these convulsive affections?

The third—What are the effects of these affections on other organs?

The fourth—What is the diagnosis of the different forms of convulsive disease?

The fifth—What are the modes of prevention and treatment?

§ 2. THE TERMS EMPLOYED.

Various terms have been employed to denote the various forms and symptoms of convulsive disease; and *one* especially has been so employed as to appear to give to one form of this affection a distinct existence and importance—I mean that of *laryngismus;* and this has led to much confusion and error in treating of this affection.

It is, in fact, as if we were to treat of cough, or any other mere symptom of disease, as a distinct disease.

Laryngismus is a symptom of disease, often a very severe one, but still only a symptom. It has been further distinguished by the epithet *stridulus* which, however, is unnecessary, if we be only well informed on the subject. There is only one kind of laryngismus, and this one is not always stridulous. In its worst and most dangerous form, indeed, it is a *silent*, because a complete, closure of the larynx.

The term laryngismus may be retained. Without intention on his part, the proposer of it chose a designation which associates itself very appropriately with that of another partial form of convulsive disease—viz: strabismus. And other symptoms of convulsive affection may receive designations which will assimilate equally well together and with these; such are chirismus and podismus, for the spasm of the wrists, the hands, or the fingers, or of the feet or toes, or the carpopedal spasm, as these have been called; whilst the term sphincterismus may be used to designate the spasmodic affections of the sphincter ani, or neck of the bladder, assuming the form of tenesmus or strangury.

Let this termination in *ismus* be used only to designate a *symptom*, and that of a purely nervous or spasmodic or convulsive character.

Laryng*ismus* will henceforth be viewed merely as a symptom, as cough is a symptom, to be traced to its origin,—to

the special disease on which it depends,—and will no longer be confounded with laryng*itis*, as I fear it still is by some practitioners.

A reform in nomenclature is at once the usual result of progress in medical science, and the efficient cause of improvements in the art and practice of medicine.

§ 3. THE PREDISPOSITION.

The predisposition to convulsive affection, and especially to that form of it which has been designated laryngismus, is sometimes so marked, that all the children of a numerous family have been successively affected with this disease. Such an instance was published, by a father, in the Lancet, in April, 1841. Such instances have been observed by all physicians of experience.

Whether this predisposition be hereditary, or be induced by external circumstances, has not, perhaps, yet been accurately determined. I suspect that the effects of *locality*, as a damp soil, has frequently constituted the predisposing cause of this affection, and that a total change of residence is as important as a corrective of this predisposition as a change of air has appeared to be in the actual attacks; and this both for the safety of the individual patient and that of future children of the same parents.

But I must also add that I have known the children of different branches of the same family to be liable to this affection, though their localities have been distant from each other.

§ 4. THE CAUSES.

No irritation of the substance of the cerebrum or cerebellum can produce a muscular spasm or contraction *immediately*. This fact is the result of all experiments on animals, and and of all observations on the human subject. No disease, therefore, *limited*, in itself and in its effects, absolutely to the cerebrum or cerebellum, can be the cause of convulsion.

But irritation of the *membranes* within the cranium produces various muscular contractions—a fact which I ascertained in an important experiment, which I carefully detailed in the second series of my "Observations and Suggestions in Medicine," p. 64. No doubt *disease* sometimes acts as an irritant to these membranes, and produces its peculiar effects or symptoms—a fact for which we are indebted, with the light which it throws upon diagnosis, to experimental physiology.

But it is when a source of irritation is applied to the medulla oblongata, or medulla spinalis, that the most energetic or frightful forms of muscular contractions, or of convulsions are induced.

Lastly, when certain nerves connected with the spinal marrow, which I have designated the incident spinal nerves, are irritated, especially at the points of their origin in the cutaneous, mucous, or other tissues, various muscular contractions, now designated excited and reflex, occur. Excited through the medium of these incident nerves, the spinal centre sends forth its influence along certain muscular nerves especially associated with the former, and peculiar muscular actions ensue.

Infancy is the most excitable period of human existence, whilst it is exposed to its own peculiar sources of irritation.

Of these, one is the peculiar condition of the gums and of the alveolar processes which occurs during dentition. It is one of great vascular action and fulness, and of consequent tumefaction and pressure on the dental nerves.

Another excitement frequent in the age of infancy is that arising from the condition of the stomach, in cases in which food has been given in quantity or quality not easy of digestion. The gastric acid is then secreted in undue measure, adding this source of irritation to that of indigestible aliment.

It is a singular fact, that the age of convulsive disease is specially that of dentition, and of what I may term dubious diet. Dentition, as I understand the term, begins at birth, or even before; it is then that the tissues of the alveolar processes and cavities become the seat of augmented vascular action and nervous excitement, which do not cease until dentition is completed. I think it probable that many convulsive affections and their dire effects have their origin *in utero;* certainly many of the latter are congenital.

A third source of irritation is that which arises from morbid matters retained in the lower part of the alimentary canal, especially undue acidity, undigested food, flatus, scybala.

It is a well-known fact, that there is a greater mortality amongst children deprived of their nurse and natural food, and, as the phrase is, 'brought up by the hand,' than amongst children that are duly nursed. Whether this greater mortality depends on the greater prevalence of *convulsive* diseases is not so well determined. This is a question still requiring careful investigation.

It is difficult to determine the best kinds of food for infants deprived of the breast. Diluted cow's milk, but especially asses' milk, would seem the most natural, whilst the wholesomeness of *farinaceous* food is at least questionable.

A fourth source of excitement is that of the atmospheric air itself, and especially of the north, east, or north-east winds; and perhaps certain vapors, or the exhalations in certain localities.

The influence of certain states of the external atmosphere is probably exerted on the incident nerves of the larynx itself, which are thus excited, so as to induce, through reflex action, partial or complete closure of that organ. How important, then, is it to protect the susceptible little patient from an influence so fraught with danger!

With this influence of inspired air may be compared that of water, or other fluids, given to drink.

It is especially in this manner that the cold, dry air of the north-east wind, or the cold, damp air of certain localities, inspired, or cold fluids taken into the pharynx, may act in inducing laryingismus, especially in the cases of undue susceptibility, whether hereditary or induced, which obtains in this malady.

It is precisely what is observed in *choking* from any cause. I know a patient in whom the larynx and pharynx are so excitable, that, for a long time, he has been unable to swallow cold water, or use even warm water, as a gargle without laryngismus. A drop of water, or a particle of bread, falling on the rima glottidis, produce a precisely similar, but more severe effect in all, i. e., laryngismus or even laryngismus stridulus.

The north or east wind, a cold and damp atmosphere, certain vapors in the atmoshere, etc., act on the unduly susceptible incident laryngeal branches of the pneumogastric nerve, and induce its *closure* by reflex action; the dashing of cold water on the face acts on the tri-facial nerve, with which are mysteriously associated in action, the muscles which *open* that organ. How perilous, under such circumstances, the attempt to give the little infant *anything* to swallow.

Mr. Barlow observes—"I have seen four cases in which drinking brought on the paroxysm. Hot or cold fluid was more excitant than lukewarm. In one instance, the last attack was induced in this manner; in previous attacks, there had been crowing; in this, the glottis seems to have been instantly closed, and convulsions and death speedily followed. In another, I observed that the attack was induced by

sleep, excitement, pleasure, vexation, or the act of swallowing."

I have watched the effects of these causes, singly and combined, too carefully to doubt that they may, severally or together, produce or renew convulsive affections in infants. It is difficult to determine the specific action of each, but certainly, whilst strabismus, or the spasmodic contraction of the hand or foot, may arise from teething, and from gastric or intestinal irritation, the condition of the larynx is very apt to be affected by the north-east winds, or other conditions of the atmosphere, and the sphincters, by the contents of the rectum and perhaps of the bladder.

A little experience will teach us, in a case so involved in obscurity and doubt as to the individual cause, most carefully to avoid *all;* this conclusion is of the greatest moment in practice.

I think it highly probable, fifthly, that the occurrence of this convulsive affection may become associated with an augmented excitability of the spinal centre; and that it is from this cause, that the attacks are apt to be reproduced by causes too slight to produce such an effect originally. Hence, the modes of treatment found to be beneficial, should be continued carefully, *long* after the little patient *appears* to be well. This caution I also regard to be of great practical importance.

§ 5. THE INFLUENCE OF SLEEP.

The condition of the nervous system, during sleep, is peculiar. It is not unallied to epilepsy, and hence, it often passes into epilepsy, and especially into convulsive affection, in infants. The influence of volition being withdrawn, or nearly so, the muscles of the neck and larynx, like the orbicularis, contract on the venous system distributed in the neck, and the breathing becomes audible; it also ceases to be rhythmic; and during its first and deeper stage, attacks of laryngismus, or other forms of convulsive disease, in infants, as of asthma or epilepsy in adults, are apt to occur.

In deep sleep, there is a low degree of laryngismus even, manifested by stertor or snoring.

During sleep, the nervous centres are congested. If we open the eye, the conjunctiva is often observed to be deeply suffused.

In this condition of the circulation, we need not feel surprised if undue excitability occur, and that a dream, or an

excitant of reflex action, may add to the peculiar condition of the larynx and of respiration, which I have described, that which constitutes actual laryngismus.

§ 6. CEREBRAL DISEASE.

I have already stated, that no disease of the cerebrum, limited in its effects to this organ, can induce convulsive affection; for no irritation of the cerebral substance can produce muscular contraction.

It is only when, by its locality, it can irritate the membranes, the incident or motor nerves, or the medulla oblongata; or when, by its magnitude, it can produce compression of that medulla, that it can produce such effect.

Inflammation, or tubercular granulation or tumor, with serous effusion at the base of the brain, may act in the former manner; and effusion into the ventricles, or inflammation, or congestion, in the substance of the cerebrum, may act in the latter.

One source of congestion is the violent fits of cough in pertussis; another is equally the cause and result of general convulsion.

In all these cases the cause of convulsion resides within the cranium, and our attention must be directed to subdue morbid action in this cavity.

§ 7. EXCITED REFLEX ACTIONS.

In by far the greater number of cases the symptoms of convulsive affection are reflex actions. As stammering would scarcely exist without emotion, so laryngismus, for example, is most effectually avoided by avoiding *every* exciting cause of reflex action.

These causes are, as I have already stated, principally *four:*

1. The irritation of the *trifacial* nerve in the gums and alveolar processes in dentition.
2. The irritation of the pneumogastric nerve by indigestible matters in the stomach.
3. The irritation of spinal nerves from morbid contents of the intestines.
4. The influence of the external atmosphere, under certain circumstances, on the incident branches of the pneumogastric nerve of the larynx, etc.

The influence of all these causes of reflex action is more or less *continuous;* and hence arises a peculiarity in their effects, which are more or less persistent. The strabismus,

though not absolutely constant, frequently continues for a considerable period; and the chirismus and podismus are apt to assume a tetanoid character.

Some of the symptoms are, indeed, transient in their duration, as the laryngismus. This difference is explained on the principle of interference; the acts of respiration interfere with the tendency to closure of the larynx; at this age volition only slightly interferes with the closure of the fingers or toes; the laryngismus is therefore less permanent, than the chirismus or podismus; but when the laryngismus *is* continuous, it induces a fatal asphyxia.

The convulsive affection would also seem to wear out the excitability of the spinal system—as is seen distinctly in certain experiments—and so to cease, although the exciting cause may not be removed, and no principal of interference exists.

Such being the character of these reflex actions, it is extremely interesting to observe what are the precise organs affected. These are precisely those which are bound, as it were, by the chain of special incident and reflex nerves with the spinal centre, and constitute the spinal system. The larynx, the sphincters, are special examples of this fact; as are, I believe, certain symptoms connected with the gall-ducts. The morbid actions of the muscles of the eyeballs, of the fingers, of the toes, and in the general convulsion of the countenance, and of the general frame, obviously point out the special part of the nervous system first and specially affected, and the mode and character of the affection.

I appeal to my fellow-members of this Society, whether we were prepared to pursue the investigation of this momentous subject, before the recent views of the spinal system and its associated incident and reflex nerves with their special centre, and with their excito-motor and reflex modes of action, were laid before the profession. Whereas now, a case of convulsive disease, whatever its seat and form, is as intelligible to us as the simplest and best devised experiment, possessing the additional and almost tragic interest of an experiment replete with a thousand dangers on a human being, the object of the keenest affections, hopes and fears!

I must now add that this malady has sometimes appeared to affect other branches of the pneumogastric nerve besides the laryngeal—viz: the bronchial, and the branches distributed to the minutest branches of the air-cells, the gastric, the

hepatic, and the nephritic, inducing peculiar effects. These effects have not hitherto been duly traced. But I beg to call the attention of the members of this Society to the interesting topic. Bronchitic, gastric, hepatic, and venal symptoms frequently form a part of this convulsive affection; the flow of bile is arrested; the urine is frequently affected with a deposit of the lithates. Are these cause or effect, or independent of the other phenomena?

Through this labyrinth, the knowledge we now possess of the spinal system can alone guide us. Like the stethoscope, it enables us to apply another, and in this instance, a new and internal sense, to the investigation and diagnosis of disease.

§ 8. OF LARYNGISMUS SPECIALLY.

Without closure of the larynx—extreme laryngismus, and the consequent congestion of the nervous centres — there could, I believe, be no convulsion! This closure of the larynx must be complete, in the affection under consideration, as in all others, before convulsion *can* take place. Hence I have known the actual convulsion long warded off, by constantly and carefully watching the little patient, and whenever laryngismus was threatened, dashing cold water on the face. In this manner, too, the late Dr Denman prevented the accession of puerperal convulsions in a case of the deepest interest, of which the details are given in his valuable work.

In pertussis, there is no convulsion, however violent the fits of coughing, until extreme laryngismus or closure of the larynx occurs.

In bronchitis, and in asthma, there is no convulson, because there is no laryngismus.

Laryngismus is the efficient cause of convulsion in epilepsy. It is the first link in the fearful chain of symptoms in this fearful malady. To Mr. Barlow I am indebted for the details of a case of epilepsy, in which the extreme laryngismus and closure of the larynx was preceded by stridulous laryngismus, precisely similar to the crowing inspiration of infants.

It is laryngismus which destroys the patient in hydrophobia.

It is laryngismus which destroys the patient in the case of poisoning with strychnine.

The extent of the fearful influence of laryngismus in disease has not been appreciated in or by the profession. It is

though not absolutely constant, frequently continues for a considerable period; and the chirismus and podismus are apt to assume a tetanoid character.

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laryngismus which proves the cause of sudden death—which has occasionally induced dismay in the practitioner, and unjust reflections on the part of the patient's friends—in cynanche tonsillaris, and in scarlatina anginosa.

It was by merely witnessing the phenomena of strangulation in hydrophobia, that the late Dr. Physick of Philadelphia, was induced to suggest the operation of tracheotomy in this dire malady—a suggestion full of promise, if, indeed, there be hope at all in this disease.*

Juster views of the pathology of epilepsy will at least prevent us from attempting to give anything, far less any irritant or excitant, as cold water, or sal volatile, in the fit of epilepsy. In epilepsy, as in the crowing inspiration of infants, extreme laryngismus is the cause of sudden death. When this does occur, it may be induced by the attempt to give even cold water. Mr. Barlow was recently informed of such a fatal event, arising from this very cause, acting in this very manner, in the case of a little patient on his list, at the Infirmary for Children.

I believe a tube worn in the trachea would render the attack of epilepsy impossible! Extraordinary idea.

§ 9. EMOTION, PASSION.

Many facts lead to the conclusion that emotion and passion *act*, not through the cerebral system of nerves, but the spinal and ganglionic systems. Hence these affections of the infantile mind are the frequent cause of various convulsive affections, and especially of strabismus and laryngismus.

Hence, too, the importance of procuring a judicious, careful, and patient nurse, of excellent temper herself, and able to maintain a state of mental tranquillity in her little charge.

I have frequently observed a momentary strabismus when an infant is brought into the room, which ceased soon afterwards.

Under the same or similar circumstances, a momentary laryngismus also not unfrequently occurs.

External noises, disturbance of any kind, fretfulness and passion, however induced, are the frequent cause of strabismus, or of laryngismus—this last sometimes, in its se-

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*See the Life of P. S. Physick, M.D., by J. Randolph, M.D., &c., 1839, page 58.

verest form is attended by asphyxia, and not free from danger.

The fear of this is the true and real objection to the use of the gum-lancet; otherwise there is *none*. The question must be resolved, in each individual case, by carefully watching its effects. I have often thought, that as a thermometer might be employed to determine the condition of the dental circulation, a lancet might be concealed, in a ring, or so as to have none of the formidable appearance of the ordinary gum-lancet.

But the objection which applies to lancing and scarification of the gums applies with equal force to the administration of medicine, enemata, and almost every kind of remedy.

There is ample scope in such cases for the judgment of the physician. The infantile mind must be cared for as well as the body; and whilst every cause of reflex action is carefully removed, every source of mental fret and irritation should be as carefully avoided.

It is at the moment of awaking, especially, that these precautions are most required. It is on awaking that every source of surprise, every noise, every cause of excitement, should be specially avoided; it is at this moment of repaired excitability that spasmodic or convulsive movements are most apt to be excited.

The important and extensive influence of emotion in exciting disease or its paroxysms, is still untraced. Amongst mental causes, it is emotion which induces insanity; it is not, for instance, the calculations, but the hopes and fears, of the speculator, which derage his reasoning faculty, and set imagination at fault. The paralysis agitans is induced originally, and throughout its course, by emotion. What an interesting topic for investigation.

§ 10. CONVULSION, ASPHYXIA.

In the actual convulsion the larynx is closed with a forcible effort of expiration, the respiration being suspended; and there are violent actions of the muscular system—of the eyes, face, and general frame.

These muscular actions are rarely equal on the two sides of the mesial plane, and therefore the eyes, countenance, and general frame, are greatly distorted, and the aspect of the little patient is frightful.

The venous system of the head and face is greatly distended, (in epilepsy in the adult, I have known this condition issue in ecchymosed spots.)and the countenance appears tumid and livid. The eyes, the lips, the tongue, and doubtless the venous and capillary systems of the cerebrum, the thymus, &c., partake of the same condition.

The aspect of the countenance is very different, according as the attack assumes the character of convulsion, or that of asphyxia; in the former it is livid and purple, with distention of the veins on the temple and forehead, and of the capillaries; in the latter it is livid and pallid, and cold and clammy.

These two conditions should be carefully distinguished, though they are doubtless more or less combined in every case.

The violent convulsion leaves a state of congestion of the cerebrum, with the danger of effusion, or actual effusion.

This state of asphyxia leaves the blood deteriorated.

§ 11. AUGMENTED EXCITABILITY.

I will take the liberty of detaining the Society a few minutes whilst I state a few facts on the subject of augmented excitability in the nervous centre, in a certain class of diseases.

If a mild voltaic current be made to pass through the denuded and insulated spinal marrow, or lumbar nerves, in the frog, for ten or twenty minutes, and then be withdrawn, the lower limbs are thrown into a state of tetanoid spasm. This condition of the nervous centre or muscular nerve I have designated the *electrogenic*.

If, instead of affecting the nervous tissue in this manner, we place the frog in a dilute solution of strychnine for a similar period, the spinal marrow being divided near the occiput, we have again a tetanoid condition of the limbs.

These two tetanoid conditions are not, however, the *same*, or even similar: the first is permanent, and requires for its manifestation no excitant; the second is one of predisposition only, and exists only when induced by some external exciting cause; in the former, the electrogenic state is the excitant; in the latter, the strychnogenic condition, if I may use this term, is not an actual excitant but only one of induced augmented susceptibility to other excitants.

I believe these two conditions exist in certain peculiar states of disease in the human subject, of which they are therefore, the appropriate *types;* spinal arachnitis, a spicula of bone irritating the spinal marrow, produces effects similar to the former; a lacerated cutaneous nerve, (inducing tetanus), and a poisonous state of the blood, (in hydrophobia), produce a condition similar to the latter.

All this is a deduction from experiment; I commend it to the attention of my brethren in the profession.

I now return to the subject of convulsive affections in infants.

The spinal centre becomes so excitable in some of the cases of this convulsive affection, that causes which have no influence, or no injurious influence in health, produce marked effects in the course of this malady.

I have already observed that the little patient, on being brought into the room in which the physician, a stranger, is waiting, generally or frequently manifests the effects of the slight emotion in a transient strabismus or laryngismus. The slightest fret of mind, or sudden fret of mind, or sudden start, produces a similar effect.

A mere change of room, or of locality, or of the direction of the wind, will often renew the malady, even when it has ceased for a time. On the other hand, "air and exercise" are the great antidotes to augmented excitability. Change of air, the exposure to the air when the weather is fine, are as essential as security against its inclemencies.

During the progress of dentition, it frequently happens that repeated attacks of this affection, in its varied forms, are experienced. It is, therefore, apt to be protracted through many months, indeed, until dentition is completed.

I fear that this excited condition may be protracted even through future years, and that the convulsive affection of the infant may lead to epilepsy in the adult. Fearful idea! The attacks of this very epilepsy begin with a species of laryngismus,—an actual closure of the larynx,—and proceeds, in its own manner, to produce the general convulsion, and the other formidable effects of this dire malady.

It is singular enough, and the idea that this laryngismus belongs to a peculiar nervous system, cannot be repeated too often, that, in the excitability induced by strychnine, it is a species of laryngismus which is the peculiar symptom, when its effects are severe or fatal, in the human subject, or in the warm-blooded animal. In the extreme case it is, as in the extreme laryngismus, instant asphyxia.

This laryngismus, so far from being peculiar as an affection of infants, is, as I have already stated, common to a whole class of affections of the true spinal system: emotion, hysteria, epilepsy, tetanus, hydrophobia; one and all affect the larynx especially; one and all produce a state of varied laryngismus. This affection of the larynx, therefore, instead of being a disease, or a symptom of disease, is a symptom denoting an affection of a certain nervous *system.*

The true idea of the morbid affection under consideration, as of tetanus itself, is that of an excitant or excitants, which first induce a state of augmented spinal excitability, or *erethismus;* then, various excited reflex actions; and thirdly, general convulsion.

Tetanus and hydrophobia consist in an induced spinal erethismus, the paroxysms consisting of augmented or excited spasm, from external excitants.

The infant under the influence of what I will designate the convulsive tendency, susceptibility, or erethismus, may therefore be *compared* to the patient affected by tetanus. The causes are similar,—irritated nerve, inducing spinal erethismus; and this, susceptibility to excited reflex actions; the effects are analogous—tetanoid affections.

Not dissimilar in nature is the state of things in the augmented excitability which is induced by strychnine, and which occurs in hydrophobia.

In the infantile disease, as in tetanus, the augmented susceptibility is indeed induced through irritated *nerve;* whilst in the effects of strychnine, and hydrophobia, it is induced by a poison in the *blood* itself—important distinction in the pathology of this class of diseases, first pointed out in my New Memoir, published—if, indeed, it can be said to be published —in 1844. In both sets of cases, the disease consists in an induced augmented excitability of the spinal marrow, or *spinal erethismus* of the spinal marrow, whilst its paroxysms are the result of excited reflex action, until we arrive at general convulsion of the nervous centres.

§ 12. EFFECT ON THE CEREBRUM.

Let actual convulsion once occur, and all is changed and complicated. It is no longer the spinal system only which is affected; the cerebrum has become congested, and effusion is threatened; and now double care is required to prevent the wreck of intellect or of limb, from the influence of pres-

sure, or of counter pressure, of the organ of mind itself, or of the tissue occupying the base of the cranium—the membranes, trifacial and pneumogastric nerves, the medulla oblongata.

What a study for the physician enlightened by physiology! How extensive, how complicated! How are we to be guided through this labyrinth? By experiment. The tissues, to which I have referred, must be irritated and compressed, one by one, and the respective effects noted with the utmost care and attention; and the results must then be compared with the events witnessed in actual practice.

We may imagine what is the precise condition of the brain and of the medulla oblongata, and indeed of the interior circulation generally, by carefully observing the congested state of the veins, and of the capillary vessels of the *face*.

We should also carefully examine the condition of the *bregma*, or fontanelle: it is concave, plane, or convex, affording an index to the condition of the circulation, or it may be effusion, within the cranium.

§ 13. SUDDEN DISSOLUTION.

Sudden death may take us by surprise at *any* period of convulsive disease.

This event may be of two kinds: the first is asphyxia, from extreme laryngismus; the second is what I have designated secondary asphyxia, and probably arises from the circulation of blood imperfectly arterialized in the coronary arteries.

Extreme laryngismus may occur quite unexpectedly amongst the first symptoms, or in the midst of such general convulsive affection as may have repeatedly taken place, and passed off without much apparent danger. If but a slight strabismus, or a slight contraction of the finger, remain; or even if all symptoms have entirely disappeared, fatal laryngismus may still occur, taking us by surprise, all having appeared well and safe.

I do not think we have any means of judging *when* this event is more likely to take place than usual.

Our prognosis, therefore, however justly tinctured with hope, should always be most guarded, in this class of maladies; otherwise our judgment will assuredly be sometimes painfully called into question.

The prevalence of a northeast wind appears particularly apt to induce laryngismus in its extreme form; and in this manner several cases of sudden death have occurred in practice nearly at the same period of time.

A fit of passion is frequently the immediate cause of closure of the larynx, and of dissolution. And though I never knew so disastrous an event to occur, I have often feared lest it might take place during the use of the gum-lancet; and it is precisely the real danger of exciting a paroxysm of convulsive affection, which is the real, and I may add, the sole, objection to the use of this important remedy.

In reference to such an event, Capuron remarks—"L'enfant a été réellement suffoqué." Dr. Johnson, of Dublin, saw "a child in a state of asphyxia, caused by this disease, recovered from apparent death by the instantaneous application of artificial respiration."

In the case of threatening of asphyxia, the remedy is—*instantly* to dash cold water on the face and other parts of the general surface. The further treatment, in general, is that for *asphyxia*, especially the institution of artificial respiration. The thorax and abdomen should be speedily compressed, and then be left to the force of resilience, in order that inspiration, however slight, may follow. Frictions of the limbs, with pressure, directed upwards, should be used energetically.

The douche, the attempt at artificial respiration, the frictions, should be repeated and pursued, however apparently ineffectual, with *perseverance.*

Tracheotomy was suggested by Dr. Hugh Ley, and it was successfully performed by Dr. Johnson, in this emergency. On learning this afterwards, Dr. Ley added the following note:—

"I have made no essential alteration in my statement, that the grounds upon which I was originally disposed to advocate the propriety of the operation may remain upon record, and as a proof of the value of well-conducted physiological experiments in illustrating pathological facts, and suggesting remedial expedients. It is a reply to the maudlin sensibility, with regard to such experiments, too prevalent at the present time."—*On Laryngismus Stridulus*, p. 273.

The cause of sudden death in this class of maladies, is, however, not always mere laryngeal asphyxia. It is sometimes, as I have already stated, of that kind which may be termed secondary, or cardiac asphyxia—a condition which

arises from the frequent partial closure of the larynx, and consequent partial asphyxia. The blood is then not sufficiently oxygenated or decarbonized; and as in *all* morbid conditions of the *blood*, there is still more sudden death than in the worst extreme forms of laryngismus. The poisoned blood acts on the fibres of the heart, destroying their irritability. Death is instantaneous, and I fear there is neither time, nor hope, for remedies. Arrested respirations leave a few minutes; arrested circulation scarcely a moment.

Sir Benjamin Brodie mentioned a case to me in which sudden death had occurred in a case of tetanus, after all tetanic symptoms had disappeared. The patient had been in a bath, and was dressing, saying that he was quite well! What was the rationale of this sudden event? Was it exhausted excitability? Does the same principle hold in the convulsive diseases of infants?

§ 14. THE DIAGNOSIS.

The diagnosis in the convulsive diseases of children is—

1. That of the kind or *origin* of the disease, and especially that between the *centric* and *ex-centric* affection.

2. That of the *form* of the disease, and especially that of the different, partial, and general convulsive affections; for it may be so partial as to consist of one symptom only, as strabismus laryngismus, or it may be general, and frightfully convulse every part of the muscular system.

In the *centric* affection there are generally pain, and cerebral symptoms, such as affections of the sleep, temper, and senses—wakefulness, fretfulness, intolerance of light and noise, and a peculiar contraction of the brow—from the beginning.

In the *ex-centric* affection, there is, at the first, no cerebral symptom: all the phenomena are spinal: general convulsion must take place before cerebral symptoms are observed.

The diagnosis between that part of this affection designated laryngismus and laryngitis, is founded on two circumstances:

1. The transitory character of the symptoms in the former, and its permanency in the latter; and

2. The complication of the former with strabismus, chirismus, and other convulsive or spasmodic affection.

The same principles of diagnosis distinguish spasmodic la-

ryngismus from any paralytic influence or compression of the pneumogastric nerve on the larynx, in which case there may be other effects of paralysis of the pneumogastric nerve, especially accumulated secretion in the bronchial tubes, and pulmonary tissue, leading to cough and various '*râlés*.' The reality and the unbiassed diagnosis of this form of disease are still to be ascertained.

Laryngismus induced by bronchitis, or any inflammatory affection of the trachea or larynx, acting as an irritant on the incident laryngeal nerves, would be distinguished by the same absence of other spasmodic affection.

§ 15. POST-MORTEM APPEARANCES.

The post-mortem appearances depend entirely on the nature and course of the disease.

If the case be one of those rare instances of affection of the cerebrum or its membranes, leading to irritation or compression of the medulla oblongata, intra-cranial incident nerves, or the membranes in which certain of these are embedded, the morbid appearances will be such as are usually found in these cases. There will be *cerebral* symptoms.

In one case the medulla oblongata was distinctly indurated.

If there have been repeated violent convlsions or fits of pertussis, we shall perceive cerebral congestion or effusion, and with this probably tumefaction of the *thymus* gland.

But in those cases in which no repeated general convulsions had occurred, and in which the little patient had died suddenly perhaps, no marked appearances of the nervous centres may be detectable. The disease in this respect, as in so many others, resembles asphyxia, or tetanus.

The condition of the gums and alveolæ, of the stomach, of the intestines, of the lungs, the liver, the kidneys, should be carefully examined; but of the morbid appearances in these nothing is known.

§ 16. PREVENTION AND TREATMENT.

I now come to the last and most important topic of my paper—the prevention and treatment of convulsive diseases; to which, indeed, the views which have been given immediately lead, and in the course of which they serve as a torch to enlighten our path.

The first thing to be accomplished by the physician, as in all other cases in practice, is a full and accurate diagnosis of the disease, its form, its simplicity or complexity; its effects; and especially whether there has or has not occurred general convulsion.

If the case be one of centric origin, which is the more rare, the original disease must, of course, be treated energetically. If it be of ex-centric origin, or reflex, which is by far the more frequent case, the excitant or excitants, whatever these may be, must be carefully sought out, removed and avoided.

But *as a rule*, in *all* cases, the influence of *all* excitants, *all* excitants of emotion, of reflex action, must be absolutely removed. For even in the centric affection, it may be undue excitability only which is induced, and the *attacks* may depend upon external excitants.

The augmented arterial action within the gums and the alveolar processes, must be subdued by deep, diffused, and repeated scarification of the gums, conducted with every precaution, to avoid excitement of a mental kind.

The stomach should be emptied forthwith. This may frequently be readily done by irritating the fauces with a feather, or the finger; or a dose of ipecacuanha may be given; and then such diet should be administered, according to such rules, as may prevent the presence and delay of undigested matters in the stomach. A new and healthy nurse, or asses' milk, given by means of the bottle, are resources of the utmost moment.

The intestines should be promptly washed out by means of ample enemata of tepid water, and they should then be kept well relieved, gently free indeed, by means of mild but efficient, aperient medicine.

I have great reason to suspect the existence of undue *acidity*, not only in the stomach, but in the course of the intestinal tube, in those cases; and I strongly recommend *antacid* aperients, such as a combination of the bicarbonate of potassa, and the carbonate of magnesia, in the proportion of one-fourth and three-fourths, in some proper aromatic or aperient vehicle, and repeated so as to produce the double effect of neutralizing the gastric acid and moving the bowels.

The next object is, to guard the little patient against every injurious impression from the external atmosphere. When the northeast winds prevail, or the air is cold and damp, the patient's bed should be surrounded, at intervals of about one

foot, by *three* distinct curtains or tents of gauze, or of net; the air of the room should be protected from partial currents, be well supplied with hygrometric moisture, and be maintained at a temperature of 65° Fahr.

Every mental disturbance must be avoided; the approach of a stranger, the administration of the gum lancet, and, not less, of medicine or other remedies, must be managed as carefully as possible.

The *sleep* should be *watched;* if it be disturbed by dreaming or starting, the infant should be gently awakened, and any sudden noise or light should be avoided; precautions necessary, indeed, at all times.

As stammering would scarcely exist without emotion, so the convulsive diseases of infants and children, especially those of ex-centric origin, would scarcely exist without emotion and excitants of reflex action; an aphorism of the utmost moment in practice, and admitting of great extension; for, in this respect, with the affection under consideration, chorea, the paralysis agitans, tetanus, and even hydrophobia itself, may be ranked, in some degree.

If laryngismus should exist and be extreme, the larynx being closed, water must be forcibly sprinkled on the face; the larynx is opened by the new excitant acting on other nerves and muscles, and inspiration is excited.

If apparent asphyxia have taken place, and this measure have been tried in vain, artificial respiration should be attempted: the chest and abdomen should be compressed, and the pressure should be suddenly removed, (I once witnessed asphyxia from this cause in a puppy. I applied my ear so as to examine the beat of the heart; the pressure induced expiration, and inspiration followed on its removal, and the puppy recovered. Or the lips of the practitioner should be applied to the mouth of the infant, whilst its nostrils are closed, and its trachea pressed against the œsophagus: in a word, every measure should be adopted to which we have recourse in other cases of asphyxia.

If general convulsion be threatened, or have occurred, every precaution and measure should be adopted which can protect the cerebrum from congestion and its effects: the alcoholic lotion applied to the head, leeches, cupping, mercurials, and purgative medicines, fomentations and warmth applied to the feet, &c., must all be employed with promptitude and energy.

The secretions must be attended to—the bile, the urine especially. If the former be deficient, the use of warm wa-

ter, enemata, should be doubly enforced. If the urine be effected with lithate deposits the antacid aperients must be doubly enjoined.

The hydrocyanic acid, hyoscyamus, &c., may also prove useful.

§ 17. CONCLUSION.

And now, Sir, I beg to draw this paper to its conclusion. If I have, in the course of my observations, vindicated the importance and necessity of physiology—experimental physiology—to the practical physician;—if I have shown the value of the recent investigations into the nervous system, in the investigation, diagnosis, and treatment of diseases, I have fully attained the object which I had proposed to myself, in bringing this paper before you and my fellow members of this society, and I beg to thank you for your kind attention to its rather lengthy details.

I will conclude by adducing the words of one of the most logical and eloquent writers in the English language.

"In proportion as any branch of study leads to important and useful results—in proportion as it gains ground in public estimation—in proportion as it tends to overthrow prevailing errors,—in the same degree it may be expected to call forth angry declamation from those who are trying to despise what they will not" (for cannot) "learn, and wedded to prejudices which they cannot defend. Gallileo would probably have escaped persecution if his discoveries could have been disproved, and his reasonings refuted. The same spirit which formerly consigned the too powerful disputant to the dungeon or the stake is now, thank Heaven! compelled to vent itself in railing, which you need not more regard than the hiss of a serpent which has been deprived of its fangs."*

I know not what treatment could have induced the learned author to write these words; but I venture to affirm that it was not more iniquitous than that which has been inflicted on the THEORY—of *hypothesis* there is none—which has guided me throughout the discussion set forth in this paper, which may be viewed as a specimen of what may be done for the whole class of the diseases of the nervous system.

The best, the only reparation, must consist in the publication of such an Essay as the present one, in which the value and importance of the doctrine are shown in its practical

* Lectures on Political Economy by R. Whateley, D.D., Archbishop of Dublin.

application to pathology and therapeutics. That doctrine—the doctrine of the distinct spinal system; of incident and reflex nerves, in special conjunction with their spinal centre—the excitor nature; the reflex form of its actions—the special organs and functions under its control:—that doctrine—the anatomy and the physiology of the spinal system, has, in effect, become pathology and therapeutics! The nerves, the actions, the functions involved, are the same in health and in disease; an experiment has been made to present the type of a malady, and to teach us what we ought to do to succor our patient, when in extreme suffering, and in the utmost peril!

All this is depicted—placed before the eye itself—in the admirable plates which, thanks to Mr. Simpson, of Stamford, accompany my New Memoir, published, that is, printed and calumniated, (*technically*, "written down,"—see the British and Foreign Medical Review,) in 1844, which does contain something new, something which neither the preceding Memoirs, nor any other preceding book whatever, contains. Such is the power of calumny—for, in this respect, I am compelled to differ from the eloquent author whose words I have last quoted—that this Memoir is as if it were unpublished! The serpent, slander, is *not* yet "deprived of its fangs," and it is cold-blooded and long-lived, as well as venemous. I can only repeat my conviction that there are, in that volume, principles which will lead to great improvement in our practice, rejecting calumnious reviews.

I have pursued experimental physiology. I have applied the results to the mitigation of human suffering. I only wish the profession to receive my offering in good part, and to examine for themselves.

THE WESTERN JOURNAL.

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LOUISVILLE, FEBRUARY 1, 1848.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF LOUISVILLE.

The Annual Catalogue is now in the press and will soon be distributed. Meanwhile the Dean, Professor Cobb, has favored us with the following recapitulation of the present class:

Kentucky	133
Tennessee	85
Mississippi	45
Alabama	36
Indiana	30
Missouri	29
Illinois	10
Texas	9
Ohio	8
Louisiana	6
Virginia	5
Arkansas	4
Georgia	2
North Carolina	1
New York	1
Iowa	1
Wisconsin Territory	1
Total	406

It may not be uninteresting to many of our readers, especially the *alumni* of our University, and its predecessor, differing from it by

name and charter only, to see the progressive growth of the school, and we accordingly give it:

A. D.,	1837, first session,	80
	1838, second session,	120
	1839, third session	204
	1840, fourth session	208
	1841, fifth session,	262
	1842, sixth session	189
	1843, seventh session	243
	1844, eighth session	286
	1845, ninth session	345
	1846, tenth session	349
	1847, eleventh (present) session	406

In this statement we see, (with the exception of the sixth session, when there was a falling off,) a regular increase, not always at the same ratio, it is true, but a growth so steady, as to indicate the influence of substantial and permanent causes of prosperity. When this school was established, in 1837, there were, west of the mountains, but five; since that time, however, eight others have come into existence, between the Gulf of Mexico and the Lakes. One of the five has been discontinued, but the number which remain and are now in operation is thirteen. We have not, as yet, any certain account of the number of pupils, in any one of these schools except our own; but if it should only average one hundred--we have an aggregate of sixteen hundred for the Valley of the Mississippi and the Lakes, an evidence of rapidly increasing population which cannot be mistaken.

NEW MEDICAL SCHOOL IN LOUISVILLE.

Letters from Frankfort received within the last ten days, (it is now January 24th), announce that the Legislature of Kentucky, had before them an application for a charter for a second Medical School in this city. It was made, in person, by Dr. Joshua B. Flint who, in 1840, was requested by the Board of Managers of the Medical Institute, to relinquish the Chair of Surgery; a fact which we mention, as throwing light on the motives and origin of the new enterprize; in reference to which, as public medical journalists, it is both our privilege and duty, to express those views of its necessity and its influence on medical education in the West, and especially in Louisville, which we have deliberately formed.

We say, then, that an additional school in the central parts (at least) of our great valley, is neither needed nor demanded. As Louisville is an eligible place for *a* Medical School, if that established by the city ten years ago, had not grown, and become respectable; if its professors had been incompetent, and, therefore, did not attract pupils; if the Trustees had retained them in office, notwithstanding a manifest failure; and thus rendered the advantages of this central position nugatory, and no other remedy existed, it would not only be admissible, but praiseworthy, now to institute another school. But these conditions do not exist. The tabular view, presented in the preceding article, shows, that in ten years, the class has advanced from eighty, to four hundred and six; increasing at a ratio of forty per cent.; although, during the time, eight new schools, within the States from which it derives pupils, came into existence. In this unprecedented increase, through so considerable a period of time, we have an expression of the confidence of the profession, from which there should be no appeal. The Louisville school has, then, fulfilled the highest destiny, which the city and State could have proposed for it; and not disappointed the hopes and wishes of the students and physicians of the States, from which its classes have been made up. Now, what more could the people of Kentucky and of the West, generally, desire? We feel well assured, that *they* do not desire any thing more. But there might be a state of things, which would *seem* to justify and even demand the establishment of a second school in this city. It might happen (but we do not expect it) that more students would flock hither, than could be well received, and successfully taught in the present school; in which event, the decision, at *first* view, would be, that a second school should be set up. Even then, however, such a step might not be for the welfare of the medical profession, and the benefit of society; for the reason, that the anatomical and clinical resources, might not be adequate to the wants of a greater number of students than now attend; in which case, if attempts were made to retain more, the advantages to the whole would be diminished, and the standard of attainment lowered. When, however, the population of the city shall have advanced fifty or one hundred per cent., the means necessary to the growth and prosperity of a second school will be brought into existence, and then it ought to be organized. Till then, every effort should be directed to the firm and triumphant establishment of the first.

But suppose we admit, that, without reference to the population of the city and the means of instruction, a second school ought to be established as soon as the present attracts more pupils than it can teach, that state of things has not arrived. Some of the European schools, have several hundred more than the present Louisville class, and for many years the University of Pennsylvania has ranged between four and five hundred; yet the number has not, by the profession at large, been regarded as excessive. For the preceding two years, the classes in this city, have not reached three hundred and fifty. This year alone, has the number risen to four hundred; and, *should* no other school be established, it may not, (indeed under a scarcity of money certainly *would* not) again exceed, should it even reach that number:—the state of things, then, which, for argument we admitted, does not at present exist, and (referring solely to the public good), the projected school ought not, therefore, to be called into existence.

We may be asked, however, have not X, Y, and Z the same right to teach as A, B, and C? Undoubtedly they have. The right is natural and inalienable; but the right to grant degrees, that shall be passports to public confidence, is conferred by society, in its legislative capacity. Lawyers are admitted to practise, under a license from a court, appointed by the State government; and physicians are admitted to practise, under a diploma granted by Trustees, deriving their power from the same government. But wherefore, is that government charged with authority to grant charters, if it is to exercise no discretion? Most obviously, the whole system proceeds on the theory, that it *is* to exercise such discretion; otherwise a charter, being a matter of course, becomes an absurdity. And what is the theory of its discretion? Just as certainly, the public good. That is the end of all. However private and limited any corporation may be, it is presumed to have some bearing on the public weal; which is promoted by its existence, and by the existence of other corporations, of a like kind, the aggregate influence of which on society will be felt for good. If not felt at all, they would not be maintained by legislative authority; if felt for evil, it would be madness for the State to continue to charter them. Now what we have said, is sufficient to show, that in the exercise of a wise and foreseeing discretion, the Legislature ought not to authorize the establishment of another school in this city, at *this* time, for its means, as we have intimated, are sufficient for one only. Undivided, they may, by a proper administration, maintain it in usefulness and respecta-

bility:—divided, it would sink in both, faster than its competitor could rise. But, suppose that the rate of decline in one, and of growth in the other, should be precisely the same? Would the interest of medical education gain by the operation? Every judicious medical man, in the entire west and south, would answer—NO! but the very reverse; for two inferior schools could no more make up for one superior, than two negatives in human affairs, could make a positive—whatever they may do in algebra. To have able medical teachings, there must be able teachers; but to have these, (permanently) there must be large classes. Small classes can no more *secure* teachers of ability—than inferior teachers can draw numerous classes. Multiply schools then, beyond the demand and the means of instruction, and they become filled with inferior men, whereby the injury, at last, falls upon society. The public good is sacrificed, to the benefit of individuals.

Anxious as we have long been, to see, at least *some one*, of the many schools of our great valley, ascend to the same level with the highest of the older States, we cannot but view with deep concern, whatever threatens to throw back, the only one which has, as yet, approached that platform; and we cannot doubt, that every deep-thinking physician, who is jealous of the honor of his profession, will unite with us in this feeling. He must desire to see among us, at least a single institution, so well appointed and furnished, in means and men, as to render it unnecessary for our pupils to seek eastern schools, for the purpose of completing their education. At this time the University of Louisville, is ahead of all the rest; and if its means of instruction should not be reduced, seems likly to reach, and remain at that elevation, which all should desire to see somewhere exhibited in the West. We would say, then, to the people of Kentucky and of the city of Louisville, do not throw embarrassments in its way; but correct the errors in its administration and strengthen its weak places, if any exist; watch over its interests; and allow it to accquire the maturity and strength that will render it a permanent ornament of the State, and the pride of the medical profession of the West, before you undertake another.

We have heard it said, that competition is necessary to this distinction, and entirely concur in the opinion. But it must not be a competition which takes away the means of success, while it stimulates to effort. It need not to be domestic competition. The pupils reside over the West and South, which have, as we have already seen,

twelve other schools, one of which is in Kentucky. Could greater competition be desired, by those who have the largest confidence in its power? Is not a school at St. Louis, or Memphis, or Lexington, or Cincinnati, a rival to that of Louisville; and do not these schools incite each other to effort, precisely as if they were all in Louisville. Suppose the whole of them were transplanted to this city, can any one believe, that the consequence would be the greater growth of its own University? Or that, in the aggregate, they they would continue to have the five or six hundred pupils, now in them? So far from this, it may be safely affirmed, that all medical teachings would soon be at an end; for the available means, when thus cut up, would be insufficient for any. But if those means are, now, only sufficient for one good institution, it follows that the removal of any one of them, to this city, would inflict the same injury, in a proportionate degree; while the establisment of a new one, by augmenting the general competition, would be still worse, than the transfer of one of them, as, we lately understood, was in the contemplation of its professors.

With these remarks we dismiss the subject. As public journalists we have looked, in all we have said, to the interests of the medical profession in the West and South; and if we are not mistaken, every view we have presented, is such as a journal published out of the State, and edited by persons having no connexion, either with Louisville or its University, might have taken. If so, we have discharged our duty as humble guardians of the profession, and having, thus placed our journal *rectus in curia*, we dismiss the subject.

A VISIT FROM DR. CARTWRIGHT.—MEDICAL STATISTICS.—EPIDEMIC CHOLERA.

We lately had a visit from the distinguished physician, and able medical writer, Dr. Samuel A. Cartwright, of Natchez, while on a tour of observation and improvement of health. On the invitation of the medical class of our University, Dr. Cartwright delivered before them two lectures on medical statistics, and the numeral method of testing the effects of different plans of treatment; in the course of which he pointed out several of the efficient causes of the great prevalence of empiricism, and the vast consumption of nostrums, patented and unpatented, by the people of the south and west. He announced as the

result of his statistical references, that human life, in the aggregate, is not so long in the valley, as it is east of the mountains; and assigns, as one of the causes, the overweening reliance of the people on empirical remedies, with the gross adulteration of many of the more important medicines, sold to our physicians and retail apothecaries. In reference to the latter he stated, as a fact, that medicine chests are sent into the southwest, containing the medicines of the shops, and certain preparations of them, under various empirical names. The former he had ascertained to be often adulterated or effete, while the latter were composed of genuine and active articles. As examples, he mentioned sulphate of quinine, calomel, aperient pills, and vermifuges. The quinine is often mixed with cinchonine, the calomel contains corrosive sublimate, the aloes sold, are the hepatic, while the quacks, and eastern druggists in collusion with them, monopolize the socotorine, and work it up into cathartic pills; the recent spigelia is monopolized in the same way, and the wormseed oil, sold to our apothecaries, is adulterated, while the genuine and active is labelled as a nostrum! All this is truly deplorable, but what or where is the remedy?

We asked of the Doctor his first lecture for publication in our journal, and the class made the same request. We are happy to say, that it will appear in our next number, and, simultaneously, as a separate publication, by the class.

As the professor of Pathology and Practice, happened to be lecturing on epidemic cholera, at the time of the Doctor's visit, by request of the former, he came before the class and delivered two extempore lectures, on the history and treatment of that disease at Natchez, in 1832. It will be recollected by many of our readers, that the Doctor's great remedy, was the following compound:

R. Powderd Capsicum, grs. xx.
Calomel, grs. xx.
Camphor, grs. x.—Mix.

To be taken, either in powder or pills, every two, three, or four hours; and according to the testimony of many respectable planters at the time, and the declarations of the Doctor in his lectures, this remedy was eminently successful. In the constitutions of the people further north, it was not, however, on the whole, as effective as the compound of calomel and opium, which made the basis of all successful treatment.

We have reproduced these facts, at this time, because of the threatened second invasion of the same epidemic. That the disease has, for

the last year or two, been advancing to the west of Asia, and several months since entered Europe, seems quite certain. How long it will be in traversing that continent, we cannot say, but recent (though not reliable) intelligence, represents it as having reached London. If so, our readers will have the account confirmed to them, through the newspapers, before they will see this article. But whether true or false, every physician should expect a visitation at no distant time, and prepare himself to meet it, by a full review of the various methods of treatment, pursued in the last. The medical population changes so fast in this country, that at least one-half of our present physicians, are unacquainted, except from reading or lectures, with the epidemic of 1832–'4. It behooves all such, to apply themselves diligently to the study of what was then and afterwards published; that the invader may not find them either sleeping, or unfurnished with the best means of defence.

DEATH OF MR. LISTON.

Our correspondent at Paris writes us, December 14th: "The news of Mr. Liston's death has just reached us, and, as you may imagine, has saddened the faces of us all. No particulars have been received, except that he died after an illness of three weeks, of hemorrhage of the lungs, and that science is in mourning wherever the sad intelligence has spread. It is reported that the hemorrhage was connected with aneurism of the aorta." Our correspondent promises us in his next letter a fuller account of his case. Mr. Liston was as favorably known as any European surgeon to the profession of our country, and the cordiality of his manners endeared him to the American student in London. Referring to this quality our correspondent remarks: "No stranger ever treated me with the cordiality, and, I may say, the affection, that Mr. Liston did. I looked forward to the coming spring with double pleasure, since I hoped to spend a portion of it in his society."

DEATH OF DIEFFENBACH.

This eminent surgeon has also paid the debt of nature. He died suddenly at Berlin in December last.